

MasterTop[®] 1205

Three component solvent free high build epoxy floor coating

DESCRIPTION

MasterTop 1205 is a pigmented, solvent-free, high build epoxy floor coating system designed to offer seamless durable floor protection at applied thicknesses between 0.2 to 0.50mm.

With the addition of **MasterTop SR No. 3** (slip resistant aggregates) between coats, anti-slip resistant applications can be achieved in system build-up thicknesses between 0.50 to 2.0mm.

PRIMARY USES

MasterTop 1205 exhibits excellent wear, abrasion and chemical resistance and is suitable for use in a wide variety of industrial and commercial applications. It can be used to provide a surface coating with a high gloss hygienic finish or a slip resistant coating system.

MasterTop 1205 provides impermeable protection against common oils, greases, lubricants, aviation fuels and hydraulic oils such as Skydrol. As in all corrosive situations, a full analysis of operating and exposure conditions is required, followed by reference to chemical resistance data to ensure product suitability.

MasterTop 1205 can be used extensively in but is not limited to the following areas of application:

- Chemical manufacturing plants.
- Pharmaceutical and other medical facilities.
- Car production and showroom facilities.
- Aircraft hangers and maintenance areas.
- Warehouses with high density traffic.
- Food and beverage production areas.
- Vehicle movement areas.

ADVANTAGES

- Excellent wear and abrasion resistance.
- Superior chemical resistance.
- Smooth high gloss finish for hygienic applications.
- Slip resistant finish in trafficable applications.
- Easy application by brush, roller or squeegee.

PACKAGING

MasterTop 1205 is supplied in 20 liter packs.

COLORS

Available in standard colors and with color matching or RAL / BS colors depending on quantity required. Contact your Saudi Master Builders Solutions representative for more details.

TYPICAL PROPERTIES

Laboratory tests carried at	25°C	40°C
Pot Life	Approx. 35 mins	20 mins.
Initial Cure	24 hours	18 hours.
Max. overcoating time	36 hours	24 hours.
Final cure	7 days	5 days
Full chemical resistance	7 days	5 days
Mixed density	1.6 approx.	
Max. service temp.	60°C	
Compressive strength	75 N/mm ²	
Flexural strength	40 N/mm ²	
Tensile strength	20 N/mm ²	
Bond strength	In excess of the cohesive strength of parent concrete.	

GUIDE TO APPLICATION

Remove all surface laitance, oil, grease or any defective concrete that will reduce the bond of the **MasterTop 1205**.

The surface to which the **MasterTop 1205** is to be applied must be flat.

Surface irregularities must be ground down or filled out with **MasterBrace ADH 2200** or repair materials from **MasterEmaco** range.

A light etch giving the profile of medium grit sandpaper is the ideal surface for the application of **MasterTop 1205**, this can be achieved by light grit blasting, captive blasting or surface grinding.

After all preparation has been completed, ensure dust is removed from the surface. This is best achieved using an industrial vacuum.

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PRMING / SEALING:

MasterTop 1205 does not require a priming coat.

MIXING:

Add the entire contents of color pack to base and mix for 3-5 minutes after homogeneity of base color add the entire content of the reactor container into the base container and mix the two components for 2 minutes using a slow speed drill fitted with a special mixing head until all striations have disappeared and a uniform color is obtained.

APPLICATION

MasterTop 1205 is a versatile product and can be applied in various application thicknesses from 200 microns to 300 microns per coat giving DFT thickness of 0.4 to 0.6mm when applied as a two coat system.

To achieve a smooth finish at application between 200 microns to 300 microns per coat, a short hair roller or brush is suitable.

For slip resistant finishes, apply the base coat first. This coat can then be scattered with **MasterTop SR No. 3** aggregate by completely blinding at approximately 0.5-1.0kg/m². Apply aggregate to wet base coat. After initial cure (12 hours at 40°C) the excess aggregate should be removed by brushing or vacuuming.

Alternative textures can be obtained by varying the amount of **MasterTop SR No. 3** broadcast on to the base / sealer coat.

The top coat can now be applied. Depending on the surface profile, type and density of the **MasterTop SR No. 3** used, the top coat may consume more material than the base coat to achieve a fully sealed surface. The top coat must be applied within the maximum over coating time period i.e. 36 hours at 25°C or 24 hours at 40°C.

Prior to application, **MasterTop 1205** should be stored undercover and protected from extremes of temperature in an air-conditioned environment immediately prior to application.

EXPANSION JOINTS

Expansion joints in the existing substrate floor must continue through the **MasterTop 1205** coating. Contact your local Master Builders Solutions representative for advise on Master Builders Solutions sealants.

CHEMICAL RESISTANCE

Fully cured **MasterTop 1205** samples have been tested for chemical resistance to the following chemicals for 7 days @ 25°C:

Lactic Acid 10%	Resistant (color change)
Citric Acid 10%	Resistant
Acetic Acid 10%	Resistant
Hydrochloric Acid 18%	Resistant (color change)
Sulphuric Acid 50%	Resistant (color change)
Nitric Acid 20%	Resistant (color change)
Sodium Hydroxide 50%	Resistant
Ammonia (0.880) 10%	Resistant
Petrol	Resistant
Mineral Oil	Resistant
Butanol	Resistant
Skydrol	Resistant
Saturated Sugar Solution	Resistant
Saturated Urea Solution	Resistant

COVERAGE

SMOOH FINISH

20 liter pack of **MasterTop 1205** covers 80 m² @ a dft. of 200 microns (two coats required).

SLIP RESISTANT FINISH

20 liter pack of **MasterTop 1205** covers 80 m² at a dft. of 250 microns (2 coats required). **MasterTop SR No. 3** approx. 0.5-1.0kg/m².

EQUIPMENT CARE

Remove uncured **MasterTop 1205** from tools and equipment using **MasterTop Thinner No. 2**. If **MasterTop 1205** has cured then it can only be removed by mechanical means.

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MasterTop 1205 Technical data

Test standards	Results
Tensile Strength (ASTM D 2370)	55 N/mm ²
Tensile Strength (ASTM C 307)	28 MPa
Tensile Strength (ASTM D 638-10)	> 55 N/mm ²
Elongation % (ASTM D 2370)	10 %
Flexural Strength (ASTM C 348-08)	59 MPa
VOC (ASTM D 2369) (ASTM D 3960)	18 g/L
Depth of water penetration (DIN 1048)	0 mm
Water Absorption % (ASTM D 570-10)	0.01%
Abrasion Resistance (ASTM D 4060) / 1000 cycles	< 50 mg
% of Solids by (Volume/ weight) (ASTM D 2697:03)	100% solids
Impact Resistance (ASTM D 6272)	NO Cracks/No Disbonding
Shore D hardness (ASTM D 2240-05)	86

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STORAGE AND SHELF LIFE

Store out of direct sunlight, clear of the ground and on pallets. Protect from rainfall. Avoid excessive compaction and protect from extremes of temperature.

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 could be tainted during the curing/ drying phase of the product). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal the containers after use.

NOTE

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

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

QUALITY AND CARE

All Master Builders Solutions Products are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health and safety standards of ISO 9001 and Master Builders Solutions ESHQ recommendations.

* Properties listed are based on laboratory controlled tests.

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

CONTACT

Should you require any further information, please do not hesitate to contact us:

www.master-builders-solutions.com/en-sa
enquirycc.saudis@mbcc-group.com
M: +966 13 853 8600

Master Builders Solutions Saudi Arabia for Manufacturing LLC.
P.O. Box 1884, Al Khobar, KSA

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