

MasterTop[®] 1231

Self smoothing solvent free, decorative epoxy overlay system for concrete floors

DESCRIPTION

MasterTop 1231 is a multi-component, self-smoothing, solvent free, decorative epoxy overlay system designed to provide continuous protection for concrete floors at thicknesses of between 2.0-4.0 mm. For greater thicknesses contact Master Builders Solutions Technical department. The cured material produces a dense, colourful, glossy surface.

The product has also been successfully applied to glazed and terrazzo tiles, steel and timber. For applications other than to concrete, please contact your Master Builders Solutions representative.

TYPICAL APPLICATIONS

MasterTop 1231 has excellent wear and abrasion resistance to floors subjected to high volume traffic.

The smooth, ultra-dense, high gloss and decorative finish is ideal for situations requiring a hygienic, easily cleaned surface.

The product offers good general resistance to a broad spectrum of chemical corrosives, but as in all cases of chemical exposure a full analysis of operating conditions is required, followed by reference to chemical resistance data, to ensure product suitability.

MasterTop 1231 may be applied in the following industries

NB This gives examples only and does not constitute a full and comprehensive list. For further information on application possibilities contact Master Builders Solutions Construction Chemicals LLC.

- Food production and processing
- Beverage production - including soft drink manufacturing
- Pharmaceutical areas, laboratories, clean rooms
- Engineering workshops and assembly lines
- Showrooms, demonstration areas
- Industrial and commercial cold kitchens
- Retail
- Schools, hospitals and hotels
- Office and corridors
- Commercial Buildings

ADVANTAGES

- Excellent wear and abrasion resistance
- Easily applied
- Smooth high gloss finish for hygienic applications
- Easily cleaned
- Good general chemical resistance
- Colourful - improves the working environment

PACKAGING

MasterTop 1231 is supplied as a 45.48 kg multi component pack.

TYPICAL PROPERTIES*

Laboratory tests carried out at 25°C	
Pot life	35 min
Cure time	15 h
Compressive strength 7 days ASTM C579-01 : 2012	>75 N/mm ²
Density of mixed material	1.59 kg/m ³
Flexural strength BS 6319 Part 3 / ASTM C580	>35 N/mm ²
Tensile strength BS 6319 Part 7 / ASTM C307	>17 N/mm ²
Abrasion resistance ASTM D4060 (CS17 Wheel, 1000 cycles with 1kg wt)	Loss of mass <70 mg
Water Absorption ASTM C413	<0.1%
Impact Resistance EN ISO 6272-1 : 2011 – 1.5 meters with 1kg	Passes
Critical Irradiance Flammability DIN 4102-1 : 1998	Passes
Integral of light attenuation (Test period = 30 min) Flammability DIN 4102-1 : 1998	Passes

If required **MasterTop 1231** can be overcoated with **MasterTop TC 442W** Clear.

Refer to the method statement for coverages and application details.

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APPLICATION GUIDELINES

SURFACE PREPARATION

The preferred method for surface preparation of concrete is captive blasting, which gives a well prepared laitance free, vacuum cleaned surface. Prior to application **MasterTop 1231** 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 for the mixed material.

SEALING

Damaged or deeply pitted areas can be repaired and levelled using **MasterTop 1231** filled out, if required, with additional aggregate.

It is essential to seal the concrete surface prior to the application of **MasterTop 1231**, to prevent air from the substrate rising through the **MasterTop 1231** while it sets.

Seal the concrete with **MasterTop 1200** diluted with 0.5 L suitable thinner (Xylene / MEK / Acetone) (if required or permissible).

Pour the base and reactor components into a suitable mixing vessel and add the suitable thinner (Xylene / MEK / Acetone). Using a slow speed drill and paddle, mix the components for a minimum of 1-2 minutes, or until all striations have disappeared.

Apply the mixed sealer to the prepared dust free surface with a medium pile roller, at the rate of 6-8m² per litre depending on the surface profile of the concrete.

If the concrete is very absorbent, a single application may not be sufficient, and a second coat may be required to ensure the surface is completely sealed.

Allow the sealer to become tack free before applying the **MasterTop 1231**.

NOTE: For darker coloured substrates, a light colour pack should be added to the surface sealer for greater hiding power

MIXING

Pour the reactor into the base, using a suitable drill and paddle, mix the components together. Start mixing again and add the decorative aggregate component, mixing for 2 minutes or until a lump free mix is obtained. Always maintain the same mixing times throughout the application. Pour the mixed material in a strip along the edge against which the application will start. Start the levelling operation immediately. Pour the mixed components into a suitable mixing vessel of 30 litre capacity.

CLEANING

Remove **MasterTop 1231** from tools and equipment whilst still wet using a suitable thinner (Xylene / MEK / Acetone). Cured resin will require mechanical removal.

COVERAGE / YIELD

A 45.48 kg unit of **MasterTop 1231** will yield 28.60 L of mixed material.

MasterTop 1231 systems are supplied in preweighed packs which should not be split or divided. It is important to use complete packs.

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STORAGE AND SHELF LIFE

Shelf life is 12 months when stored under cover, out of direct sunlight and protected from extremes of temperature.

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.

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STATEMENT OF RESPONSIBILITY

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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.

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