

MasterTop® 1230

Self smoothing solvent free, epoxy overlay system for concrete floors

DESCRIPTION

MasterTop 1230 is a single-coloured, self smoothing, solvent free, epoxy overlay system designed to provide continuous protection for concrete floors at thicknesses of between 3.0-6.0mm. For greater thicknesses contact Master Builders Solutions Technical department. The cured material produces a dense, colorful, 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.

PRIMARY USES

MasterTop 1230 has excellent wear and abrasion resistance to floors subjected to high volume traffic.

The smooth, ultra-dense and high gloss 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 1230 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 the technical dept.

- Food production and processing
- Beverage production - including soft drink manufacturing.
- Pharmaceutical areas, laboratories, cleanrooms
- Engineering workshops and assembly lines
- Showrooms, demonstration areas.
- Industrial and commercial cold kitchens.
- Retail
- Schools, hospitals and hotels

ADVANTAGES

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

However, as with all such flooring it is essential that good housekeeping practices are followed in order to maintain the flooring in it's best possible condition.

PACKAGING

MasterTop 1230 is supplied as a 58kg (≈31.5 Ltrs) multi component pack (including color pack).

HYGIENE

Taint tests carried out on **MasterTop 1230** at the Leatherhead Food Research Association under artificially severe conditions showed that the risks of tainting foodstuffs are minimal during and after complete cure.

TYPICAL PHYSICAL PROPERTIES

	25°C	40°C
Pot Life	35 mins	20 mins
Cure Time	15 hours	10 hours
Compressive strength (ASTM C579-93)		
1 day	35 N/mm ²	80 N/mm ²
3 days	60 N/mm ²	81 N/mm ²
14 days	75 N/mm ²	83 N/mm ²
Density of mixed material	≈1.84 g/cc	
Flexural strength (BS 6319 Part 3)	30 N/mm ²	
Tensile strength (BS 6319 Part 7)	17 N/mm ²	
Slip resistance (TRRL rubber)	99	

GUIDE TO APPLICATION

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 1230** 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.

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SEALING:

Damaged or deeply pitted areas can be repaired and levelled using **MasterTop 1230** filled out, if required, with additional aggregate.

It is essential to seal the concrete surface prior to the application of **MasterTop 1230**, to prevent air from the substrate rising through the **MasterTop 1230** while it sets.

Seal the concrete with **MasterTop 1200** diluted with 0.5 litres **MasterTop THN 2** (if required or permissible).

Pour the base and reactor components into a suitable mixing vessel, and add the **MasterTop THN 2**. Using a slow speed drill and paddle, mix the components for a minimum of 1 minute, 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 1230**.

MIXING:

Pour the reactor into the base, add the color pack and, using a suitable drill and paddle, mix the components together until a uniform color is achieved. Mixing should be for a minimum of one minute. Pour the mixed components into a suitable mixing vessel of 50 litre capacity.

With the mixer still running, slowly add the **MasterTop 1230** aggregate and mix for 2 minutes or until the mixture is smooth and free of lumps.

Always keep the mixing time the same for all batches, to ensure a uniform color when the product is applied.

LAYING:

Pour the mixed material onto the primed and sealed surface, and spread to the required thickness using a pin screed, notched trowel or steel float. As soon as the material has been spread to the required level, the applied material should immediately be rolled with a spiked roller through the full depth of the applied system to release entrapped air. A second, lightweight and near surface application of the spiked roller should be carried out immediately after the first spiked roller application to assist with removal of spiked roller and trowel marks.

Rolling should be continued until all air is released and a uniform color is obtained, but rolling should not extend beyond 10 minutes after mixing on any occasion (rolling should cease before the **MasterTop 1230** begins to gel). Final rolling should be carried out in a direction that does not cause splashes of the applied material to fall on completed surfaces

The operator should always wear spiked shoes when using the spiked roller so that he can walk in the wet material.

EQUIPMENT

Vacuum recovery shot blasting machine	Scarifier (Errut / Von Arx)
Masking tape / polythene sheets	Grinder
Heaters for cold weather work	Overalls
Trowels	Lighting
Slow speed drill with suitable paddle	Spiked roller
Brushes or short nap hair rollers	Spiked shoes
Industrial vacuum	Pin screed

EQUIPMENT CARE

Remove **MasterTop 1230** from tools and equipment whilst still wet using MasterTop THN 2. Cured resin will require mechanical removal.

YIELD

A 48kg unit of **MasterTop 1230** will yield 27 litres of mixed material and a 58 kg unit will yield 30 litres of mixed material

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MasterTop 1230 systems are supplied in pre-weighed packs which should not be split or divided. It is important to use complete packs.

STORAGE

Shelf life is up to one year when stored under cover, out of direct sunlight and protected from extremes of temperature.

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.

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CONTACT

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

www.master-builders-solutions.com/en-sa
enquirycc.saudi@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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Disclaimer:

In view of widely varying site conditions and fields of application of our products, this technical data sheet is meant to provide general application guidelines only. This information is based on our present knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical help-line for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with Master Builders Solutions and possible resulting damages are in the sole responsibility of the customer.

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