

MasterTop® 1230

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

DESCRIPTION OF PRODUCT

MasterTop 1230 is a multi-component, self-smoothing, solvent-free, epoxy overlay system designed to provide continuous protection for concrete floors in light, medium and heavy duty applications at thickness of between 2 and 4mm or greater. The system can be applied successfully at greater thickness, but your Master Builders Solutions representative should be consulted first.

The product has been successfully applied to glazed and terrazzo tiles, steel and timber with certain modifications to the sealer system and substrate support. 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 in warehouses or workshops.

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 is used extensively in the following industries:

Food production – including dairies, bakeries and confectioneries

Beverage production – including soft drink manufacturing

Pharmaceutical and other medical or laboratory situations

Engineering – including car production and aircraft maintenance units

Showrooms, demonstration areas

Industrial and commercial kitchens High stack warehouses

Car parks and other traffic decks

ADVANTAGES

- Excellent wear and abrasion resistance
- Easily applied
- Smooth high yegloss finish for hygienic applications
- Good general chemical resistance
- Improves the working environment

COLOURS

MasterTop 1230 is available in light grey and dust grey.

PACKAGING

MasterTop 1230 is supplied as a 38kg multi-component 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 DATA OF HARDENED MATERIAL

Pot life:	20°C	65 minutes
Density of mixed material:	1.75	
Density of mixed resin /solvent:		1.07
Compressive strength:	DIN 1164	60N/mm ²
Flexural strength:	DIN 1048	27N/mm ²
Bonding strength:	DIN ISO 4624	1.5N/mm ² (concrete failure)
Abrasion resistance:	DIN 53754-Taber	98mg
Modulus of elasticity:	DIN 1048	9000N/mm ²
Co-efficient of linear thermal expansion:	DIN 53752	8.0x10-5K-1

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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. Other suitable methods are surface scarifying using mechanical scarifiers, such as Errut or Von Arx, high pressure water jetting or sand/grit blasting.

Damaged or deeply pitted areas can be repaired and levelled using **MasterBrace ADH 2200**

SEALING:

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** resin diluted with 5% solvent.

Pour the base and reactor components into a suitable mixing vessel, and add 5% of solvent. 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 5-8m²/kg, 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, base and colour pack components of the **MasterTop 1230** into a suitable mixing vessel, with a capacity of not less than 25ltr. Using a suitable drill and paddle, mix the components together until a uniform colour is achieved.

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 colour 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 be rolled with a spiked roller to release entrapped air and remove trowel marks.

Rolling should be continued until all air is released and a uniform colour is obtained.

The applied product should be rolled again after 20-30 minutes.

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

Rolling should cease before the **MasterTop 1230** begins to gel.

MAINTENANCE:

To keep the floor in pristine condition, it should be treated with 2 or 3 coats of an acrylic emulsion polish with a metallic base.

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

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EQUIPMENT CARE

Remove **MasterTop 1230** from tools and equipment whilst still wet using solvent. Cured resin will require mechanical removal. Yield A 38kg unit will yield 21.7ltr of mixed material.

STORAGE

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.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage and disposal advice, consult Master Builders Solutions's Technical Services Department.

SHELF LIFE

Up to 12 months if stored in unopened containers according to manufacturer's instructions.

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 STATEMENT

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies world-wide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

* Properties listed are based on laboratory controlled tests.

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