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MasterTop® 1230

Epoxy based coloured seamless self-smoothing architectural flooring system

DESCRIPTION

MasterTop 1230 is a seamless, self-smoothing architectural flooring system based on an advanced solvent free epoxy resin system and selected graded aggregate. The smooth impervious surface finish provides an easily cleaned and hygienic surface with excellent resistance to chemical and mechanical attack.

RECOMMENDED USES

- Pharmaceutical and cosmetic industries
- Laboratory areas
- Medical facilities
- Clean rooms and other sterile areas
- Showrooms
- De-contaminable areas
- T.V. studios
- Warehouses and high rack storage
- Laundries

FEATURES AND BENEFITS

- **Pre-packaged and proportioned** - No job site errors
- **Wide colour range** - Able to personalize an installation
- **Excellent durability** - Long service life
- **Easily cleaned** - Low maintenance cost
- **De-contaminable**- Bacteria able to be removed
- **High resistance to chemical and mechanical attack** - Able to use in a wide range of applications
- **Seamless and jointless** - No places for bacteria to hide

PROPERTIES

Compressive strength(ASTM D695:08)	> 50 N/mm^2
Flexural Strength (ISO 178)	22.0 N/mm^2
Bond Strength (ASTM D4541)	> 1.5 N/mm^2 (concrete failure)
Abrasion Resistance (DIN 53754)	98 mg
Shore D hardness ASTM D2240	> 80
Can be walked over after	24 hrs
Temperature resistance	-20^{o}C to +60^{o}C

	Supply form	Density kg/L	Kg
MasterTop 1200 Part A	Cloudy Liquid	1.1	5.4
MasterTop 1200 Part B	Clear Liquid	1.0	3
MasterTop 1602 Part A	Cloudy Liquid	1.1	23.6
MasterTop 1602 Part B	Clear Liquid	1.0	6.4
MasterTop X1	Coloured paste	2	0.6
MasterTop Filler F1A	White Powder	2.6	12
Pot life (minutes)	@10^{o}C	@20^{o}C	@30^{o}C
Primer MasterTop P1602 (minutes)	70	30	20
Body Coat/Topcoat (minutes)	120	60	20
Curing Time (days)	@10^{o}C	@20^{o}C	@30^{o}C
Primer MasterTop P1602 (days)	5	2	1
Body Coat/Topcoat (days)	7	3	2
Max relative humidity	75%	90%	90%

CHEMICAL RESISTANCE

To confirm suitable chemical resistance discuss with BASF representative. Pay particular attention to aggressive cleaning cycles and temperature of both chemicals and cleaning regimes

APPLICATION

Surface preparation

Remove all grease, oil, dust, residual curing compound, mould release agent, laitance or other contaminant that could impair adhesion. Laitance should preferably be removed by light sweep blasting or hydro-jetting. Mechanical wire brushing may be appropriate for small areas.

Spalled concrete should be cut back to sound concrete and made good with a suitable cementitious **MasterEmaco** repair mortar.

Conventional concrete curing compounds should be removed before application.

The compressive strength of the substrate shall not be less than 25MPa. The concrete slab in contact with the ground must have a vapour barrier installed in compliance with DIN 18195 or equivalent or be primed with **MasterTop 1602**. After pre-treatment of

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the substrate, the bond strength of the substrate must be at least 1.5 N/mm2. The moisture content of the substrate shall not be higher than 4% throughout. The temperature of the substrate must be at least 3°C above the current dew point temperature.

Protect walls and columns against resin splashes using masking tape and plastic sheeting .

Mixing

For a project it is advisable to ensure that all **MasterTop X1** Colour Packs are the same batch number to minimise risk of colour variation.

All mixing should be done using a slow speed drill (600-900rpm) and a spiral mixing paddle, or pan mixer.

Premix **MasterTop 1200 Part A** resin, add the **MasterTop X1** colour pack, and thoroughly mix to ensure the pigment is uniformly dispersed. Add the **MasterTop 1200 Part B** hardener and continue to mix, slowly add the **MasterTop F1A** filler and mix for a further 3 minutes, occasionally scraping the side and bottom corner of container. Ensure the final mix is lump free, homogeneous and even in colour. Mixing of large mixes (multiples of the above kits) may be done in a forced action mixer. Ensure all containers are completely empty before disposal.

Priming

Prime floor with **MasterTop P 1602**, at 5m² per litre.

Application

The mixed material should be applied on to the prepared and primed floor using a notched or flat trowel to a typical thickness of 2mm minimum. The surface should be spike rolled to remove the entrapped air. Ensure application is a continuous operation and laying is within 15 minutes of mixing and spike rolled within 5 minutes of laying.

It is recommended that a small trial area be undertaken at the start of the work for approval of surface finish.

CURING

Waiting times between **MasterTop P 1602** and **MasterTop 1230** should not be less than 8 hours and not more than 24 hours. Where extended over coating times are envisaged then the BASF primer must be lightly broadcasted with MasterTop 1200 F5A or 0.3 – 0.8mm silica sand or the cured primer reactivated using mechanical techniques and solvent wiping.

MasterTop 1230 should be protected from traffic and spillage for at least 48 hours. Full chemical and mechanical resistance is obtained after 7 days.

.ESTIMATING DATA

Component ratios	Kg/m2	Thickness (mm)
Primer		
MasterTop 1602 A:B 100:27	0.3-0.5	0.3-0.5
Scratch primer		
MasterTop 1200 A:B:X1:F1A 5.4 :3.0 :0.6 :12	0.4-0.5	0.3-0.5
Body coat		
MasterTop 1200 A:B X1:F1A 5.4: 3.0 :0.6 :12	3.4-5.1	2.0-3.0

2mm thickness = 6.75m^2 per kit

SHELF LIFE

MasterTop 1230 components may be stored in tightly sealed original containers for 12 months in controlled environments, between 10°C-30°C.

PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Material Safety Data Sheet (MSDS) from our office or our website.

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