

MasterTop® 1220

Slip resistant coloured seamless flooring System

DESCRIPTION

MasterTop 1220 is a slip resistant seamless, flooring system based on an advanced solvent free epoxy resin system and selected graded aggregate. The degree of slip resistance can be adjusted to suit the service conditions and cleaning requirements. The cured floor has excellent resistance to chemical and mechanical attack.

RECOMMENDED USES

- Automotive, Aircraft and engineering facilities
- Food and beverage packaging
- General production and packaging areas
- Wet process and wash down areas
- Cosmetic and chemical industries

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
- **Adjustable slip resistance** – adjust to suit conditions and improved safety
- **High resistance to chemical and mechanical attack** - Able to use in a wide range of applications
- **Seamless and jointless** – allows floors to be kept in a hygienic state.

PROPERTIES

7 days cure @ 20°C using MasterTop 1200 Part A, B, X1 and F1A

Compressive strength (ASTM₂D695:08)
: > 60 N/mm

Flexural Strength (DIN 1048) : 35 N/mm²
> 1.5 N/mm²

Bond Strength (ZTV SIB87) : (concrete failure)

Abrasion Resistance (DIN 53754) : 98 mg

Modulus of Elasticity (SIA 162/1) : 9000 N/mm²

Coefficient of Linear Thermal Expansion (DIN 53752) : $8 \times 10^{-6}/^{\circ}\text{C}$

Temperature resistance : -20°C to +60°C

	Supply form	Density kg/L	Kg
MasterTop 1200 Part A	Amber Liquid	1.1	5.4
MasterTop 1200 Part B	Amber Liquid	1.0	3
MasterTop 1602 Part A	Amber Liquid	1.1	23.6
MasterTop 1602 Part B	Amber Liquid	1.05	6.4
MasterTop X1	Coloured paste	2	0.6
MasterTop Filler F1A	White Powder	2.6	12
MasterTop Filler F5A	White Powder	2.6	3-4/m ²
MasterTop Filler F18	White Power	2.6	0.4-0.6/m ²
Body Coat/Topcoat	@ 10°C	@ 20°C	@ 30°C
Potlife (minutes)	120	60	20
Return to service time (days)	7	3	2
Max relative humidity	75%	90%	90%

APPLICATION

Surface preparation

Remove all grease, oil, dust, residual curing compound, mould release agent, laitance or other contaminant that could impair adhesion. 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.

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. After pre-treatment of 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 8% 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

Ensure that all **MasterTop X1** Colour Packs are the same batch number to minimise risk of colour variation.

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All mixing should be done using a slow speed drill (600-900rpm.) and a spiral mixing paddle, or pan mixer. Premix **MasterTop1200 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.

Priming

Prime floor with **MasterTop P 1602**, at 5m² per litre. Whilst still wet lightly sprinkle F1A into the surface for a good mechanical key if primer is to be left longer than 6 hours for overcoating.

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.

Broadcasting of the filler

The bodycoat should be allowed to settle for 2-5 minutes prior to broadcasting F5A filler (or desired filler) is broadcast to saturation into the wet bodycoat using a rainfall pattern. This will give an even slip resistance over the whole floor.

After overnight curing vacuum off the excess sand and give the floor a light scraping with a trowel to remove any poorly adhered particles. Vacuum again to remove excess.

Topcoat

Mix Mastertop 1200 part A, Part B, X1 colour pack and 3 kg of F18 until the mix is uniform. Spread the material with a squeegee and back roll with a short haired mohair roller to give an even coating over the surface. A second topcoat maybe necessary

for light colours. 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 1220** should not be less than 8 hours and not more than 24 hours.

MasterTop 1220 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.m ²	Thickness (mm)
Primer		
MasterTop 1602 A:B 100:27	0.3-0.5	0.3-0.5
Scratch primer (Pore Sealer)		
MasterTop 1200 A:B X1:F1A 5.4:3.0:6:12	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
Broadcast	3.0-4.0	1.0-1.5
Topcoat		
MasterTop 1200 A:B:X1:F18 5.4:3.0:0.6:5	0.4-0.6	0.3-0.4

2mm thickness = 6.75m² per kit

SHELF LIFE

MasterTop 1220 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 Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by commonwealth or State legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

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