

MasterTop®1202

High-build, solvent free epoxy resin coating for concrete floor

DESCRIPTION

MasterTop 1202 is a three-component, solvent free, high build epoxy resin coating designed to provide continuous protection for concrete substrates. It provides a protective coating which is impermeable to liquids, abrasion resistant and easy to clean.

RECOMMENDED USES

MasterTop 1202 is recommended to coat new floors & floors needing refurbishment, where protection from spillage of oil and other common chemicals is required.

MasterTop 1202 is used to provide a hard wearing, easily cleaned and non – dusting surface.

Application areas include:

- Engineering workshops
- Production and assembly lines
- Aircraft maintenance and assembly
- Industrial & Warehousing floors
- Parking Areas
- Laboratories

FEATURES AND BENEFITS

- Solvent free non Flammable and low odour
- Good wear & abrasion resistance
- Easily cleanable, non dusting
- Slip resistant can be textured to give desired slip resistance
- Available in wide range of colours
- Pore free seamless film Prevents ingress of harmful chemicals

PROPERTIES

| Mixed density | :1.48 ± 0.05 |
|-------------------------------|------------------|
| | gm/cc at |
| | 25°C |
| Volume solids, | : 100% |
| Mixing proportion (by weight) | : Base:Hardener |
| | 3.170 : 0.480 |
| Pot life | : 60 Minutes at |
| | 25°C |
| Overcoating times | : Min 20 hrs at |
| | 25°C |
| | Max 36 hrs at |
| | 25°C |
| Foot Traffic | : 2 days at 25°C |
| | |
| Compressive Strength | : 60 Mpa at 7 |
| (ASTM C 579 - 93) | days |
| | |

| Flexural Strength (ASTM C-580-02) | : 38 Mpa at 7 days |
|---|--|
| Tensile Strength (ASTM C 307-03) | : 8 Mpa at 7 days |
| Pull off Bond Strength (ASTM D4541) | :>1.5 Mpa (concrete failure) at 7 days |
| Taber Abrasion @ 7 days (ASTM D 4060) | |
| CS17 Wheels H22 Wheels | : 130 mg : 230 mg |
| Shore D Hardness @ 7 days (ASTM D2240) | : 80 |

CHEMICAL RESISTANCE

MasterTop 1202 is resistant to intermittent spillages of the following typically encountered chemicals

- Formaldehyde, 40% solution
- Sulphuric Acid, 50% solution
- Hydrochloric Acid, 50% solution
- Hydrochloric Acid 5% solution
- Lactic Acid, 50% solution
- Nitric Acid, 10% solution
- Sodium Hydroxide, 50% solution
- Diesel oil
- Wine
- Sea and brackish water
- Aviation hydraulic fuels (Skydrol)
- Vegetable oils

Note: Higher concentration of mineral acids may cause matting of the surface and colour changes.

Specification Clause

The high-build, epoxy coating shall be **MasterTop 1202**, three-component, solvent free formulation. The product shall be applied at a thickness of 500 micron in 2 coats. The product shall offer excellent adhesion to concrete substrate and shall exceed adhesive bond of more than 1.5 Mpa when tested to ASTM D4541. The product shall offer good abrasion resistance, not exceeding 230 mg/ 1000 cycles on H22 wheels and not exceeding 130 mg per 1000 cycles on CS17 wheel as per ASTM D 4060 test method. The shore D hardness of the material shall be 80 as per ASTM 2240.



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APPLICATION

Temperature Requirements

- Substrate temperatures: 15°C 35°C
- Material temperatures: 15°C 30°C

Very low or very hot temperatures will make application more difficult and careful consideration should be given to storage of materials. In the cold weather conditions, pre-condition materials by keeping it in a heated room. In hot weather conditions, some form of air-conditioned storage is required. Pre-conditioned materials at 20-25°C will reduce the possibilities of flash/slow setting and other defects.

Surface preparation

Substrate concrete must be sound, free of dust, dirt, grease, paint, plaster or other debris. Damaged areas must be repaired. Honeycombing or small cavities may be repaired using either cementitious or epoxy repair mortars.

The method of surface preparation will be dictated by the size of area to be treated, location and degree of contamination.

New construction

Floors to be coated or overlaid should be at least 28 days old.

The removal of laitance and contaminants is best achieved by mechanical means such as vacuum recovery shot blasting. All contamination must be removed and a sound clean substrate exposed. Mechanical means of preparation are preferred followed by the removal of dust and other loose debris using an industrial vacuum.

Priming (if required)

MasterTop 1202 does not require priming provided the substrate is good & non- porous. In case the surface is porous MasterTop 1202 can be used as a self-prime coating or MasterTop 1620 shall be used.

The primer shall be allowed to dry completely to achieve a tack free surface before applying the first coat of **MasterTop 1202**.

Mixing

MasterTop 1202 is supplied in three components; Base, Hardener & colour pigment. Add the pigment to the base and mix thoroughly using a slow speed drill with a suitable paddle, making sure to reach the bottom and sides of the can, and then add the hardener while continuing mixing. Continue mixing for 1-2 minutes to produce a fully blended, uniform material. It is important to maintain constant mixing times throughout to ensure consistent colour and to avoid introducing excessive air into the system.

Smooth coating finish

Apply 2 coats of **MasterTop 1202** allowing the minimum over coating times between coats. Apply the second coat at right angles to the first. In case, the over coating time has been exceeded; roughen the surface lightly with a fine emery paper before applying the next coat. **MasterTop 1202** should be allowed 48 hours at 25°C temperature prior to receiving light traffic. Full chemical cure is achieved after 7 days.

Anti-slip finish

To achieve a non-slip surface immediately broadcast MASTERTOP SRA No. 1 onto the wet base coat at the rate of 1-1.5 kg/m². Excess aggregate to be removed before application of top coat. Care must be taken when applying anti-slip system in large areas; ensuring that the anti-slip aggregate is scattered immediately on the wet coating.

ESTIMATING DATA

Actual consumption of **MasterTop 1202** depends on the surface absorption, texture, loss and wastage.

1 pack of 4 kg of **MasterTop 1202** shall be able to cover an area of 5 sq.mtr in 2 coats at a dry film thickness of 500 micron.

PACKAGING

MasterTop 1202 is supplied in 4kg packs each consisting of three components.

| Base | 3.17 Kg |
|----------|----------|
| Hardener | 0.480 Kg |
| Pigment | 0.350 Kg |
| | |

SHELF LIFE

MasterTop 1202 has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

PRECAUTIONS

It is highly recommended to use necessary PPE (Gloves, mask etc.,) during installation of the product. In case of Incidents of direct inhalation, causing dizziness/giddiness, loss of consciousness, contact with eyes etc, seek immediate medical advice. The requirements may



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vary depending on the application areas. Please ensure to have proper ventilation while working in confined areas. Contact Master Builders Solutions representative in case you need further details or refer to the material safety datasheet of the product to know more. MasterTop 1202 /01/0313

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