

MasterTop[®] 1080

2 component epoxy resin floor coating

DESCRIPTION

MasterTop 1080 is a durable, easily applied, chemical and abrasion resistant protective coating, based on a two-component epoxy resin system with high solid content. It has a user friendly, mix ratio and provides a hard, durable, and glossy film. The system uses a separate color pack, which is available in a wide range.

FIELDS OF APPLICATION

MasterTop 1080 can be applied on a wide variety of substrates such as concrete, masonry, timber, etc. It is recommended as a protective coating on floors and walls where both high levels of aesthetics and chemical resistance are desired. It is ideal for:

- Multi-levels car parks
- Chemical industries
- Food and drink processing plants
- Electronic, electrical, and electroplating industries
- Pharmaceutical and cosmetic plants
- Mining industries
- Water and sewage treatment plants

FEATURES AND BENEFITS

- **High resistance to chemicals** – Durable in chemically aggressive areas.
- **Good resistant to abrasion** – Lowers maintenance costs.
- **Excellent adhesion** – Does not peel off.
- **Good adhesion to damp surfaces** – Avoids expensive surface preparation to achieve 100% dry substrates.
- **Convenient mix ration** – Permits part mixing of the pack without the risk of batching errors.

PERFORMANCE DATA

| | |
|-------------------------------|----------------|
| Dry Film Thickness (2 Coats) | 300µ |
| With Anti-Skid Filler | 400µ |
| Abrasion Resistance | High |
| Finish | Glossy |
| Service Temperature | -20°C to 60 °C |
| Ready for foot traffic @ 30°C | 1 Day |
| Full Cure @ 30°C | 7 Days |

PROPERTIES

| | Supply form | Colour | Density kg/L |
|--------------------|-------------|----------|--------------|
| MasterTop 1080 PTA | Paste | White | NA |
| MasterTop 1080 PTB | Paste | Beige | NA |
| MasterTop X1 | Paste | Coloured | 2.0 |
| Filler F1 | Solid | White | 2.6 |
| Filler F5 | Solid | White | 2.6 |

| | Components | Mix ratio by weight |
|----------------|------------|---------------------|
| MasterTop 1080 | A:B | 1:1* |
| MasterTop X1 | | 1 to each unit |

*Mix ratio by volume

Pot-life (minutes)

| | @10°C | @20°C | @30°C |
|----------------|-------|-------|-------|
| MasterTop 1080 | 120 | 90 | 45 |

Curing time (days)

| | @10°C | @20°C | @30°C |
|----------------|-------|-------|-------|
| MasterTop 1080 | 7 | 2 | 1 |

Maximum permissible relative humidity

| | @10°C | @>23°C |
|----------------|-------|--------|
| All components | 75% | 90% |

APPLICATION

Surface Preparation

The compressive strength of the substrates shall not be less than 30 N/mm². The substrates in contact with the ground must have a vapour barrier installed in compliance with DIN 18195 or equivalent or be primed with **MasterTop P 1640**. The moisture content of the substrate shall not be higher than 8 % throughout (Test by using CM equipment). The temperature of the substrates must be at least 3°C above the current dew point temperature.

Correct substrate preparation is critical for optimum performance. Surfaces must be structurally sound, clean, and free from loose particles, oil, grease, and all other contaminants. Remove oil, grease, and wax contaminants by scrubbing with industrial grade detergent or degreasing compounds followed by mechanical cleaning. Cement laitance, loose particles, mould release agents, curing membrane and other

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contaminants must be removed from the surface by shot-blasting, Blastrac®, scarifying or grit-blasting followed by vacuum cleaning. After pre-treatment of the substrate, the bond strength of the substrate must be at least 1.5 N/mm² (check with an approved pull-off tester at load rate 100 N/s).

Fill surface irregularities such as blowholes, cracks, honeycombs, etc. with a MasterEmaco® repair mortar to achieve a smooth and level surface.

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

Mixing

Use a low speed (300 rpm) electric drill fitted with a paint mixer or a wing type paddle. Mix one unit of **MasterTop 1080 Part A** with one cartridge of MasterTop X1 until the colour is uniform then add one unit of **MasterTop 1080 Part B** and mix for at least 3 minutes or until the mix is uniform and free of streaks.

Note: To ensure a uniform colour shade only use MasterTop X1 paste cartridges with identical batch numbers.

Whilst **MasterTop 1080** is supplied in pre-portioned kits for complete mixing, smaller quantities of coating can be prepared by mixing Part A and Part B in the easy to measure ratio of 1:1 by volume.

Premix **MasterTop 1080 Part A** with one whole unit of MasterTop X1 and then measure out precisely equal amounts of each component in the proper ratio into a clean dry pail for subsequent mixing. Ensure that the remaining contents of each part are not contaminated.

Placing

Apply **MasterTop 1080** by roller, brush or spray onto the prepared surface. If the surface has been treated with a fairing coat, allow the fairing coat to set; and within 24 hours apply the first coat of **MasterTop 1080**.

The first coat may be thinned up to 10% with approved thinners to aid penetration into the substrate and to maintain a wet edge at the overlaps. Follow with the second coat after 18 hours but not beyond 36 hours. The second coat may be thinned up to 10% to achieve an even appearance.

Note: When light colours are used, the addition of two MasterTop X1 colour packs is recommended and a third coat may be required. If a non-slip finish is required,

broadcast the filler to excess whilst the first coat is still wet and allow the coating to cure overnight. Remove excess sand using a scraper, and an industrial vacuum and then apply the second coat. The size and quantity of aggregate broadcasted should be selected to provide the required degree of slip resistance and are best determined by a trial sample application. MasterTop Fillers F1 or F5 are highly recommended as non-slip aggregates.

Following the application of the **MasterTop 1080**, protect coated area for at least 24 hours after laying from spillage, dust, insects, small animals, traffic, rain, moisture, etc.

CLEANING

Clean tools using water and rags before the resin system hardens. Hardened material can only be removed mechanically.

ESTIMATING DATA

Over dense surfaces with texture similar, to fine-medium sand paper the coverage rate is 5m² per litre coat. On more porous surfaces or in non-skid textures, typical coverage rate is 4m² per litre per coat

PACKAGING

MasterTop 1080 is supplied in 2 kit sizes:

| Comprising | 5 Litre | 20 Litre |
|----------------|-----------|----------------|
| Part A | 2.2 liter | 8.8 liter |
| Part B | 2.5 liter | 10 litre |
| X1 Colour Pack | 0.6kg/.3L | 4 x 0.6kg/1.2L |

SHELF LIFE

MasterTop1080 can be kept for 12 months from date of manufacture if stored in original unopened packing, in a dry enclosed place, without exposing to direct sunlight and at temperatures between 15 to 35°C.

PRECAUTIONS

For detailed Environmental, Health and Safety information, please consult and follow all instructions on the product Material Safety Data Sheet. Contact your local Master Builders Solutions office for the latest version.

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MAP#MasterTop 1080 v2-12.2020

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