

MASTERTOP[®] 1210

Epoxy resin based, industrial floor coating

DESCRIPTION

Mastertop 1210 is a seamless floor coating based on advanced solvent free epoxy resin system. The cured coating provides a glossy, easily cleaned and hygienic surface with excellent resistance to mechanical wear and chemical attack. Slip resistance can be imparted to the treated surface using selected aggregates.

Mastertop 1210 is one of the floors available from the Polykit system.

The Polykit system consists of a limited number of standardized components that allows production of a wide range of epoxy resin floors for different applications in a variety of colours.

RECOMMENDED FOR

Mastertop 1210 is recommended for floors where an attractive, easily cleaned coating is desired and where mechanical abrasion and chemical spillage could pose risk of floor damage. It is ideal for floors in:

- storerooms
- oil-pits and sumps
- corridors and stairways

FEATURES AND BENEFITS

| | |
|---|---|
| Solvent free | Safety during application. |
| Impervious, seamless and jointless | Allows floor surface to be maintained in a hygienic state. |
| Pre-proportioned | Avoids batching errors. |
| Wide colour range | Attractive floors. Pleasant working environment. |
| Chemical resistant | Lower maintenance costs. Protects concrete from chemical attack. |

TYPICAL PERFORMANCE DATA

After 7 days cure @20°C

Bond strength (ZTV SIB87) : >2.5 N/mm²
(concrete failure)

Abrasion resistance (DIN 53574-Taber) : 105 mg

Service temperature : -20°C to 60°C

Application Temperature Min.: 8°C
Max.: 35°C

PROPERTIES

a. Components

| | Form | Colour | Density |
|----|--------|---------|-----------|
| A1 | Liquid | Milky | 1.5 kg/L |
| X1 | paste | Several | 1.85 kg/L |
| B1 | Liquid | Amber | 1.05 kg/L |

b. Mixed systems

| | |
|-----------------------|---------------------|
| Components | : A1:B1:X1 |
| Mix ratio (by weight) | : 9.4:3.0:0.6 |
| Density | : 1.37 kg/L |
| Colour | : Refer colour card |
| Pot life @20°C | : 45 mins. |

Trafficable time(full traffic load) :

| 10°C | 20°C | 30°C |
|----------|----------|----------|
| 5-7 days | 3-4 days | 2-3 days |

APPLICATION

Mastertop 1210 normally does not require a primer and is a two-coat treatment on the prepared substrate.

Depending on the condition of the substrate a priming coat may become necessary, and with an optional antislip finish it can be a three layered treatment consisting of a priming coat, 2 body coats and a top coat.

Surface Preparation

Ensure that the compressive strength of floor concrete is at least 25N/mm² and that concrete slabs directly in contact with the ground have a proper vapour barrier installed as per DIN 18195 or an equivalent standard.

Correct substrate preparation is critical for optimum performance. Surfaces should be structurally sound, clean, and free from loose particles, oil, grease, or any 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 agent, curing membrane, and other contaminants must be removed from the surface by shotblasting (blastracking), scarifying or gritblasting followed by vacuum cleaning.

Fill surface irregularities such as blow holes, honeycombs, etc., with **BARRA[™]** repair mortar to achieve a smooth and level surface.

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

Joints: Existing joints in the floor should be continued through the surface levelling layer (if applied) and **Mastertop 1210** system. Design the joint dimension to allow for anticipated movement.

a. Priming Coat

Apply Mastertop 1140 (see separate data sheet) as primer if the surface is either damp, very dense or where occurrence of pin holes is unacceptable.

b. Body Coat

Note: To ensure a uniform colour shade on an area of continuous treated surface, only use X1 paste cartridges with identical batch numbers.

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Mixing

Use a low speed (300 rpm) electric drill fitted with a paint mixer or a 'wing' type paddle.

Thoroughly stir one unit of A1 resin, then add one cartridge of X1 colour pack and mix until the colour pigment is evenly dispersed. Add one unit of B1 hardener and mix for 3 minutes until a homogeneous mix is obtained.

Mixing of large batches (in multiples of the above kits) may be done in a forced action mixer

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Placing

If the floor is primed, the mixed material should be placed between 8 and 24 hours after the application of primer.

Apply the mixed coating onto the prepared floor using a brush or a short napped mohair roller at a rate of not less than 0.3 kg/m² per coat. At least two coats must be applied, with the second coat applied 10 to 24 hours after the first coat and at right angles to it. The final thickness of the body coat should be approximately 0.5 mm.

C. Top Coat

If an anti slip surface is desired, broadcast F5 filler at a rate of approximately 50 g/m², when the second body coat is still wet. Remove unbound filler after a day using scrapers, brush or vacuum and apply a sealing coat.

Note: It is recommended that a small trial is done on a typical surface for approval of the finished surface texture.

CURING

Mastertop 1210 is self curing. The curing time depends on the ambient temperature, and the quantity mixed and placed. Under normal circumstances initial curing will take place overnight.

The coating will be fully cured in 7 days.

Mastertop 1210 must be suitably protected for at least 24 hours after laying, from following trades, spillage, dust, insects, small animals, traffic, moisture, etc.

CLEANING

Clean the tools and equipment first with rags, then wipe off using a solvent such as Acetone, or Methylisobutylketone before the resin system hardens.

ESTIMATING DATA

The consumption of both the primer and body coat depends on floor profile, thickness and wastage.

On a dense, flat surface, typical consumption will be as below:

| | | |
|------------|---|---|
| Primer | Mastertop 1140 | 0.25 kg/m ² |
| Body Coats | Masterto 1210 0.5 mm in 2 coats | 0.68 kg/m ² |
| Top Coat | Filler F5 Sealer coat of Mastertop 1210 | 50 kg/m ² 0.3 kg/m ² |

PACKAGING

The various components of **Mastertop 1210** are available in the following packaging.

| Component | Description | Packaging |
|-----------|-------------------|------------------|
| A1 | Resin | 9.4 kg pail |
| B1 | Standard hardener | 3.0 kg can |
| X1 | Coloured additive | 0.6 kg cartridge |
| F5 | Filler | 25 kg bag |

SHELF LIFE

Mastertop 1210 can be stored in tightly sealed original packing for 12 months, if stored in a dry & enclosed place without exposing to direct sunlight at temperatures between 15°C and 40°C.

PRECAUTIONS

Health: Mastertop 1210 contains certain chemicals that

can cause skin irritation if exposed and respiratory reaction if inhaled. Wear gloves, masks and use hand barrier creams while handling the product. Wash hands thoroughly after handling. Should skin contact occur wash immediately with soap and water, or an effective hand cleaner.

In case of accidental eye contact, wash with copious quantities of water and seek medical help immediately. If ingested, do not induce vomiting. Consult doctor immediately.

The vapours of solvents used for cleaning can be irritating. It is therefore recommended that cleaning is done in well ventilated areas.

For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

Fire: Keep away from sources of ignition. Do not smoke while handling the product.



The Chemical Company

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STATEMENT OF RESPONSIBILITY

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