

# MasterTop<sup>®</sup> 1240

## Epoxy based high strength mortar Flooring System

### DESCRIPTION

**MasterTop 1240** is a coloured industrial flooring mortar screed based on an advanced solvent-free epoxy resin system and selected graded aggregates. The mixed mortar is screedable and can be laid to provide a jointless topping. Where the situation demands, the aggregate content can be reduced to yield a semi self-smoothing and self-sealing mortar.

### RECOMMENDED USES

Where a high level of resistance to abrasion is required. It is ideal for:

- chemical and pharmaceutical industries
- food and beverage industry
- areas subjected to heavy wear and tear
- production and packaging areas
- wet process areas
- manufacturing and storage areas
- laboratories

### FEATURES AND BENEFITS

- **Chemical, abrasion and impact resistant** - Withstands chemical and mechanical attack. Lower maintenance cost
- **Wide colour range** – Attractive floors. Pleasant working environment
- **Non-slip** – Safe working areas

### PROPERTIES

7 days cure @ 20°C using MasterTop 1240 Part A, Part B, and F15	
Compressive Strength ASTM C109/C109M	>65 MPa
Flexural Strength BS EN 13892-2:2002	30 MPa
Bond Strength (DIN ISO 4624)	> 1.5 MPa
Abrasion Resistance (DIN ISO 53754)	98 mg
Modulus of Elasticity (DIN 1048)	9000 MPa
Coefficient of Linear Thermal Expansion (DIN 53752)	8 x 10 <sup>-5</sup> K <sup>-1</sup>
Service Temperature	-20°C to 60°C
Application Temperature	Minimum 10°C to 35°C

### Components

Products	Supply form	Colour	Density
MasterTop 1200 Part A	Liquid	Cloudy	1.1kg/L
MasterTop 1200 Part B	Liquid	Clear	1.0kg/L
MasterTop X1 Colour	Paste	Various	1.40kg/L
Filler F15	Powder	Light Grey	2.6kg/L

### B. Mixed Systems

Components mix ratio by weight			
Primer			
Body Coat A:B:F15	6.872:2203:3 to 4 x 22.7		
Sealer A:B:X1:F1A	5:4:3:0.6		
MasterTop 1705/MasterTop 1210 – See datasheet			
Pot-life (minutes)	10°C	20°C	30°C
Primer MasterTop P 1602	70	30	20
Body Coat	90	60	45
Sealer (A/B/X1/F1A)	90	45	20
Curing time (days)			
Primer MasterTop P1602	5	2	1
Body Coat	7	3	2

### APPLICATION

#### Surface preparation

The compressive strength of the substrate shall not be less than 30 N/mm<sup>2</sup>. 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 P 1602. 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.

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 membranes and other contaminants must be removed from the surface by shot blasting, 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 MPa. For filling up surface irregularities such as blowholes, cracks, honeycombs. Use a MasterEmaco repair mortar.

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## PRIMER

### Mixing

Use a low electric drill fitted with a paint mixer or a paddle. Mix one unit of **MasterTop 1200 Part A** resin with unit of **MasterTop 1200 Part B** hardener and mix for at least 3 minutes or until the mix is uniform in colour and free of streaks.

### Placing

Depending on the substrate condition, apply 0.2 to 0.3 kg/m<sup>2</sup> of the primer, using a roller or squeegee. **MasterTop X1** may be added to help visually in locating areas where primers are not applied properly.

## BODY COAT

### Mixing

Mix of **MasterTop 1240 Part A** with **MasterTop 1240 Part B** and **MasterTop X1** in a forced action mixer and mix for at least 3 minutes until the mix is uniform and free of streaks. Continue to mix slowly adding 3 to 4 bags of F15. Mix for a further 3 minutes until a uniform mass and colour is obtained.

### Placing

The Body Coat is applied wet on wet onto the still tacky primer using a normal steel / wooden trowel. The mortar is screeded approximately 2mm higher than the final compacted thickness using a metal screed-bar and thickness templates. For larger areas a screed box is recommended. Compacting takes place with a steel/PVC trowel or a power float for large areas.

## SEALER

### Mixing

Use a low speed electric drill fitted with a paint mixer or a wing type paddle. Mix **MasterTop 1200 Part A** with one pack of **MasterTop X1** until the colour is uniform then add one unit of **MasterTop 1200 Part B**, add 4.5 to 6.5 kg of F16 and mix for at least 3 minutes or until the mix is uniform and free of streaks.

### Placing

Immediately after mixing, pour the material onto the Body Coat. Spread the mixed material using a squeegee. The

amount of material applied determines the smoothness of the finish. Back roll with short hair mohair roller. Depending on the compactness of the mortar, a second sealer coat may be required in order to obtain a completely sealed surface. This is of particular importance for floors that are continuously wet.

## TOP COAT

Following application of the **MasterTop 1240**, protect coated area for at least 24 hours after laying from spillage, dust, insects, small animals, traffic, rain, moisture, etc.

### ESTIMATING DATA

For thickness of 4 to 8mm system

Product	Kg/m <sup>2</sup>	Thickness mm
Primer A4:B4	0.2-0.3	0.1.0.2
BodyCoat A:B:X1:F15	9 to 18	4 – 8
Sealer A:B:X1:F16	0.4-0.6	0.2-0.3
Top Coat MasterTop 1705/ MasterTop 1210	0.4-0.6	See data sheet

### PACKAGING

MasterTop 1240 Part A	6.872 kg/pail
MasterTop 1240 Part B	2.208 kg/can
MasterTop X1 Colour	0.6 kg/pack
MasterTop Filler F15	22.7 kg/bag

### SHELF LIFE

**MasterTop 1240** 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.

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