

## MasterTop® BC 308

A two component, clear, non-solvented (total solid), epoxy binder

#### **DESCRIPTION**

MasterTop BC 308 is a non-solvented, low-viscous, clear and fluid two-component epoxy resin

#### TYPICAL APPLICATIONS

MasterTop BC 308 is formulated to be used indoors for applications in decorative area. MasterTop BC 308 can be used as a binder for stone carpets and decorative colour quartz floors. It provides after curing a smooth and high gloss appearance.

#### **ADVANTAGES**

- low viscosity
- low odour
- easy to apply
- excellent mechanical properties
- good resistance to UV lights
- excellent chemical resistance

#### PACKAGING AND COLORS

**MasterTop BC 308** is supplied in 8kg and 18kg packs and available in Colourless, transparent.

#### **APPLICATION GUIDELINES**

**MasterTop BC 308** is supplied in working packs which are pre-packaged in the exact ratio. Before mixing, precondition both A and B components to a temperature of approximately 15 to 25°C.

Pour the entire contents of part B into the container of part A. DO NOT MIX BY HAND. Mix with a mechanical drill and paddle at a very low speed (ca. 300 rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles. DO NOT WORK OUT OF THE ORIGINAL CONTAINER.

After proper mixing to a homogeneous consistency pour the mixed parts A and B into a fresh container and mix for another minute. Coloured or oven dried silica sand (or other fillers) are added to the pre-mixed binder under constant mixing. Ensure thorough wetting of the

filler. The mortar mix is spread over the substrate with a trowel then is levelled using template strips and finally levelled and compacted with a trowel or power float.

**MasterTop BC 308** is applied as a top coat to the prepared substrates by pouring. We recommend a foam rubber squeegee in order to distribute the material evenly, followed by back rolling.

The top coat and self-levelling mortar should be applied at constant or falling temperatures in order to minimise the risk of blister formation due to the expansion of air entrapped in the pores of the substrate.

The workability of reactive resins is influenced by the ambient and substrate temperature. At low temperatures the chemical reactions are slowed down; this lengthens the pot-life, re-coating interval and open time. At the same time the viscosity increases which leads to a higher consumption.

High temperature accelerates chemical reactions so that the time frames mentioned above are shortened accordingly. To fully cure the material the substrate and working temperature must not fall below the minimum. The relative humidity limitations (minimum, maximum) must be observed.

Following application the material should be protected from direct contact with water for approx. 24 hours (at 20°C). Within this period, contact with water causes white spotting on the surface (formation of carbamate) and/or stickiness that inhibits interlayer adhesion and must be removed. Apart from these limitations, the respective guidelines for this use of reactive resins in the concrete trade apply.



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#### **TYPICAL PROPERTIES\***

Mix ratio			by weight	2:1
Density	Part A		g/cm³	1.12
	Part B		g/cm³	1.00
	Mixed		g/cm³	1.10
Mixed viscosity		at 23°C	mPa.s	360
Pot life		at 23°C	min	60
Re-coating interval / ready for traffic		at 10°C at 23°C at 30°C	h d h d h	min. 36 max. 4 min. 24 max. 2 min. 12 max. 1
Fully cured/ready for exposure to chemicals		at 10°C at 23°C at 30°C	d d d	7 4 2
Substrate and application temperatures			°C	min. 10 max. 30
Max. permissible relative humidity		at 10°C at T°C >23°C	%	75 85

#### Technical data cured material\*

Shore-D hardness	85		
Taber abrasion	CS 10, 1KG, 1000U	mg	20
Compressive strength	EN 12190	N/mm²	65
Bending tensile strength	EN 12190	N/mm²	72
Tensile strength	DIN 51220	N/mm²	45
E-Module	EN 13412	N/mm²	1800

<sup>\*</sup>The above figures are intended as a guide only and should not be used as a basis for specifications.

#### SUBSTRATE PRE-TREATMENT

Substrates to be coated have to be firm, dry and load bearing, free of loose and brittle particles and substances, which impair adhesion such as oil, grease, rubber skid mark paint or other contaminants. As a rule, pre-treatment of the substrate by grit or shot blasting, high-pressure water jetting grinding or scarifying (including the necessary post-treatment) is mandatory.

After pre-treatment of the substrate, the bond strength of the substrate must be at least 1.5N/mm². The moisture content of the concrete should not be higher than 3% throughout. The temperature of the substrate must be at least 3°C above the current dew point temperature. In addition, the guide-lines relevant to the requirements for coating concrete substrates must be observed.

#### CONSUMPTION

#### Application as primer:

As a primer, the consumption is typically between  $0.3\text{-}0.5\text{kg/m}^2$  depending upon surface texture and porosity of the support.

### Application as part of the MasterTop DAP system:

Consumption rate 2.2-2.6kg/m<sup>2</sup>.

Please see the **MasterTop DAP** datasheet and method statement for more details.

#### CLEANING

Re-usable tools must be cleaned carefully with a suitable thinner (Xylene / MEK / Acetone) or with e.g. isopropanol.



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#### STORAGE AND SHELF LIFE

Store in original containers under dry conditions at a temperature between 15-25°C. Do not expose to direct sunlight and prevent the temperature from falling below the abovementioned range (crystallisation). For maximum shelf life under these conditions, see "Best before ... "label.

#### EU Regulation 2004/42 (Decopaint Guideline)

This product conforms to the EU directive 2004/42/EG (Deco-Paint directive) and contains less than the maximum allowable VOC Limit (Stage 2, 2010). According to the EU directive 2004/42, the maximum allowable VOC content for the Product Category IIA / j type sb is 500g/l (Limit: Stage 2, 2010). The VOC content for **MasterTop BC 308** is <500g/l (for the ready to use product).

### WARNING

In its cured state, **MasterTop BC 308** is physiologically non-hazardous. The following protective measures should be taken when working with the material:

Wear safety gloves, goggles and protective clothing. Avoid contact with the skin and eyes. In case of eye contact, seek medical attention. Avoid inhalation of the fumes. When working with the product do not eat, smoke or work near a naked flame. For additional references to safety-hazard warnings, regulations regarding transport and waste management please refer to the relevant Material Safety Data Sheet. The regulations of the local trade association and/or other authorities, regulating safety and hygiene of workers handling epoxy resins must be followed.

#### CE-marking according to EN 13813

Master Builders Solutions Deutschland GmbH Donnerschweer Str. 372, D-26123 Oldenburg 2308013 EN 13813: 2002 EN 13813: SR-B1.5-AR1-IR4 Synthetic resin screed for internal uses **Essential characteristics** Performance Fire behavior Bfl-s1 Release of corrosive substances SR Water permeability NPD Wear resistance <AR 1 Bond strength >B 1,5 Impact resistance >IR 4 Impact sound insulation NPD Sound absorption NPD Heat insulation **NPD** Chemical resistance **NPD** 

NPD = No Performance Determined

Performance determined in System MasterTop 1226

® = Registered trademark of the MBCC Group in many countries.

### ${\tt MBS\_CC\text{-}UAE/Top\_BC308\_05\_17/v1/}$

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are 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 law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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<sup>#</sup> Performance without any further testing

<sup>\*</sup> Properties listed are based on laboratory controlled tests.