MC-DUR TopSpeed StoneCarpet

APPLICATION ADVICE

Product properties

- Stone carpet coating system
- Two-component, glossy, transparent, low-solvent binder based on KineticBoost technology
- UV-stable
- Fast-curing
- Curing not related to temperature and moisture influence
- Short waiting time between two work steps
- Drainage capable
- Registered with DGNB (Code: W69563)

Areas of application

- Binder for drainable stone carpets in outdoor areas, e.g. balconies, loggias and terraces
- Application even under bad weather conditions
- REACH-assessed exposure scenarios: application, permanent inhalation, watercontact periodical

Processing instructions

Substrate preparation/mixing: Depending on the application and system build-up, the substrate and substrate preparation may vary significantly. Ask for separate technical advice. See general application advices, “Substrates and substrate preparation” and “Reactive Resins”.

Primer: Depending on the application and system build-up, MC-DUR TopSpeed SC or EP-based primers such as MC-DUR 1200 VK or MC-DUR 1177 WV-A. See corresponding technical data sheets.

Scratch coat: Scratch- and levelling coats of MC-DUR TopSpeed SC/quartz sand are applied with steel floats, rubber squeegees and/or adjustable screeding tools onto the primer. The scratch- and levelling coat consist of MC-DUR TopSpeed SC and oven-dried quartzsand (0.1 - 0.3 mm) mixed in a ratio of 1 : 1 to 1 : 2 p.b.w. If it cannot be over coated within 12 hours, the fresh scratch coat has to be slightly strewn with quartz sand (0.1 - 0.3 mm) immediately after application. If MC-DUR TopSpeed StoneCarpet is applied directly to the scratch coat, it must be slightly strewn with coarse quartzsand (0.5 - 1.2 mm) immediately after application to simplify the subsequent laying work. See technical data sheet "MC-DUR TopSpeed SC".

Intermediate layer: MC-DUR TopSpeed StoneCarpet can be applicated on a flexible intermediate or waterproofing layer in accordance with EAD. See corresponding technical data sheets.

Bonding layer: Once the flexible intermediate layer/waterproofing layer is ready to be walked on, a layer of MC-DUR TopSpeed flex plus (consumption approx. 250 g/m²) is rolled on and strewn in excess with oven-dried quartzsand (0.5 - 1.2 mm). If the stone carpet is applied on an old coating or on a non-sanded scratch coat, one layer of MC-DUR TopSpeed or MC-DUR TopSpeed T is applied and immediately slightly strewn with oven-dried quartzsand (0.5 - 1.2 mm / approx. 1000 g/m²). See corresponding technical data sheets.

MC-Bauchemie Müller GmbH & Co. KG
Am Kruppwald 1-8 · 46238 Bottrop
Tel. +49 (0) 2041-101 0 · Fax: +49 (0) 2041-101 400
info@mc-bauchemie.de · www.mc-bauchemie.de

Mixing: To apply MC-DUR TopSpeed StoneCarpet, MC-DUR TopSpeed T is mixed in the specified mixing ratio. After repotting in a clean mixing container, the reaction resin is stirred up again. MC-DUR TopSpeed T is added to the required quantity (mixing ratio see below) of the respective color grain (e.g. marble gravel or colored quartz, approx. 2 - 4 mm). Then mix thoroughly with a slow-speed stirrer (approx. 300 rpm) until a homogeneous mixture is achieved and the entire color gravel is wetted. Edge areas should be homogenized in between using a trowel. The use of a single or twin-shaft mixer is recommended as a mixing tool.

Application - horizontal: For application of MC-DUR TopSpeed StoneCarpet in horizontal areas, MC-DUR TopSpeed T is mixed with the respective color gravel (e.g. marble gravel or colored quartz, approx. 2 - 4 mm) in a mixing ratio of approx. 1 : 20 to 1 : 25 (parts by weight / see above). Before laying MC-DUR TopSpeed StoneCarpet, MC-DUR TopSpeed T (approx. 150 g/m²) is rolled onto the surface. The mixture is then applied fresh-in-fresh to the substrate, spreaded out and smoothed with a suitable tool (e.g. trowel, blade and height gauges). The cleaning of the tools in between to simplify installation (e.g. with MC-Verdünnung PU) is recommended.

Application - vertical: To install MC-DUR TopSpeed StoneCarpet in vertical areas, MC-DUR TopSpeed T is mixed with approx. 6 % by weight of MC-Stellmittel TX 19 and the vertical surface is pre-coated (approx. 500 g/m²). MC-DUR TopSpeed T, mixed with approx. 6 % by weight MC-Stellmittel TX 19, is mixed with the respective color gravel (e.g. marble gravel or colored quartz, approx. 2 - 4 mm) in a mixing ratio of approx. 1 : 10 (parts by weight / see above). The stone carpet mixture is then applied fresh-in-fresh to the pre-coated vertical surface with a trowel. Regular intermediate cleaning of the tools is recommended to simplify laying (e.g. with MC-Verdünnung PU). After curing, MC-DUR TopSpeed T (approx. 100 - 150 g/m²) is rolled on thinly as a sealer using a paint roller to achieve a uniform gloss level .

General information: See also leaflet ”General Application Advice - Reactive Resins”. Ensure thorough mixing of thebase and the hardener component. Following mixing material is to be re-potted into a clean container and mixed again. Exposure to chemicals may cause color changes, which usually do not affect the properties and usability of the coating. Mechanically and chemically exposed surfaces are subject to wear and tear. Regular check-ups and continuous maintenance are advised. In case of contact with disinfectants or bleaching agents such as chlorine, peroxide and sodium hypochlorite solutions, the colour of the coating surface may fade and microcracks and detachments may occur. This is typical for reactive resin coatings and is not a reason for complaints.

Base-component contains drying-agent. Sediments which may appear in the bucket have no influence on the material quality. The sediments, if appeared, must not be mixed up into the material during the normal mixing process.

MC-Bauchemie Müller GmbH & Co. KG
Am Kruppwald 1-8 · 46238 Bottrop
Tel. +49 (0) 2041-101 0 · Fax: +49 (0) 2041-101 400
info@mc-bauchemie.de · www.mc-bauchemie.de

TECHNICAL VALUES AND PRODUCT CHARACTERISTICS MC-DUR TOPSPEED T

Characteristic	Unit	Value	Comments
Mixing ratio	mass fractions	100 : 88 1 : 20 to 1 : 25 1 : 10	base component : hardener component reaction resin : color grain (horizontal) reaction resin (+5 wt-% MC-Stellmittel TX 19) : color grain (vertical)
Density (reaction resin)	g/cm³	ca. 1,1	at 20 °C and 50 % rel. humidity
Viscosity (reaction resin)	mPa·s	ca. 650	at 20 °C and 50 % rel. humidity
Working time	minutes	40 20	sealer stonecarpet
Accessible after	hours	ca. 3	Depending on layer thickness and temperature / moisture content
Resilient after (full)	hours	48	at 20 °C and 50 % rel. humidity
Compresive strength	N/mm²	ca. 13	after 7 days (MV 1 : 25 part by weight, reaction resin : color grain)
Compressive strength [1)]	°C %	≥ 2 ≤ 35 ≥ 50	air, substrate and material temperatures temperature must not fall below dew point
Consumption	kg/m²/mm g/m² g/m²	ca. 2 ca. 150 - 250 ca. 500	stone carpet micture / Varies depending on the color grain bonding layer and sealer bonding layer vertical (including 6 wt-% MC-DUR Stellmittel TX-19)
	All technical values are laboratory results determined at 21°C ± 2°C and 50% relative humidity.		

1) Viscosity and consumption depending on material temperature. For ideal consumption quantities and application properties, a material storage at approx. 20 °C is recommended.

Equipment cleaning agent	MC-Verdünnung PU
Colour	transparent
Delivery form	10 kg packs
Storage	Can be stored in cool (below 20°C) and dry conditions for 18 months in original unopened packs. Protect from frost.
Packaging disposal	Make sure single-use containers are completely empty.
EU Regulation 2004/42 (Decopaint Directive)	RL2004/42/EG AII/j (500 g/l) < 500 g/l VOC

Safety instructions
Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU30

MC-Bauchemie Müller GmbH & Co. KG
Am Kruppwald 1-8 · 46238 Bottrop
Tel. +49 (0) 2041-101 0 · Fax: +49 (0) 2041-101 400
info@mc-bauchemie.de · www.mc-bauchemie.de