

MASTERTOP[®] TC435

Epoxy based High Gloss Architectural floor coating

DESCRIPTION

MASTERTOP TC435 is a solvent free epoxy based flooring system that can be coloured to match the required aesthetics. **MASTERTOP TC435** when cured provides a durable and glossy thin coating. It has good chemical and abrasion resistance.

FIELDS OF APPLICATION

MASTERTOP TC 435 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 are desired. It is ideal for:

- Commercial premises and shops
- chemical industries
- food and drink processing plants
- electronic and electrical industries
- pharmaceutical and cosmetic plants
- warehouses

FEATURES AND BENEFITS

- Good resistance to chemicals** Durable in mild chemical contact.
- Good resistance to abrasion** Lowers maintenance costs.
- High aesthetics** Provides a high gloss surface
- Economical** Thin section reduces consumption without compromising quality

PROPERTIES

Service Temperature	: -20°C to 60°C
Application Temperature	: Minimum 10°C Maximum 35°C

a. Components

	Supply form	Density kg/L
MASTERTOP TC 435 Part A	Clear liquid	Approx 1.5
MASTERTOP TC 435 Part B	Amber liquid	Approx 1.05
MASTERTOP X1	Coloured paste	Approx 1.85

b. Mixed systems

	Components	Mix ratio (by weight)
MASTERTOP TC 435	A:B	9.4 : 3.0
MASTERTOP colour paste	X1	0.6kg

Pot-life (minutes)

	@ 20°C	@ 30°C
MASTERTOP TC 435	40	30

Curing time (days)

	@ 20°C	@ 30°C
MASTERTOP TC 435	Min 7 days	7 days

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 601 (Conipox 601). The moisture content of the substrate shall not be higher than 6 % 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.

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 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 **CONCRESlVE** repair mortar to achieve a smooth and level surface.

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

MASTERTOP[®] TC435

Primer

Mixing

Use a low speed electric drill fitted with a paint mixer or a wing type paddle. Mix one unit of **MASTERTOP TC435** Part A with one unit of MASTERTOP X1 colour pack and mix until homogeneous. Then add **MASTERTOP TC435** Part B and mix for at least 3 minutes or until the mix is homogeneous and free of streaks.

Placing

Immediately after mixing, pour the material onto the substrate and spread the mixed material using a squeegee or paint roller. The primary purpose of this primer coat is to seal the substrate completely and avoid air-bubbles formation in the placement of the Body Coat.

When the primer is still wet, broadcast with F1A lightly in the event of delay in subsequent steps. Remove excess F1A.

On very porous substrates, a scratch primer will be preferred, please consult Degussa sales representative for details.

Body Coat

Mixing

Use a low speed (300 rpm) electric drill fitted with a paint mixer or a wing type paddle. Mix one unit of **MASTERTOP TC 435** Part A with one pack of MASTERTOP X1 until the colour is uniform then add one unit of **MASTERTOP TC 435** 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 packs with identical batch numbers.

Placing

Apply **MASTERTOP TC 435** by roller, brush or spray onto the prepared surface.

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 F5 or F5A are highly recommended as non-slip aggregates.

ESTIMATING DATA

Below is an estimate of the amount required and this data may vary depending on the surface of the substrate.

System	Product	kg/m ²	Thickness mm
MASTERTOP TC 435	A:B:X1	0.17-0.34	0.15 - 0.30

SHELF LIFE

MASTERTOP TC 435 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.

PACKAGING

MASTERTOP TC 435 12.4 kg/set

MASTERTOP X1 0.6 kg/can

PRECAUTIONS

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

Flash point: 90°C.

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