MasterTop TC 428

Epoxy film coating in aqueous emulsion with glossy finishing for interior concrete floors and reinforced concrete walls.

MATERIAL DESCRIPTION

Epoxy film-forming coating in aqueous emulsion, two-component, with a glossy finish (surface brilliance of Gloss 60 ° approx. 75 - UNI EN ISO 2813). Applied by roller directly on the reinforced concrete structure. MasterTop TC 428 produces the basic film-forming coating of the MasterTop 1728 and 1728 R systems, colored, glossy, easy to clean and sanitize, permeable to vapor, with a high protective capacity against the aggressors of reinforced concrete.

FIELDS OF APPLICATION

MasterTop TC 428, as part of the MasterTop 1728 and 1728 R systems, is suitable, for example, for the protection of floors and walls in the food industry, garages, showrooms, workshops, warehouses, laundries, storage areas for non-aggressive products, traffic areas pedestrian, corridors. MasterTop TC 428 is also used as a finish for the water-based epoxy systems of the MasterTop 1700 line. MasterTop TC 428 is used for indoor environments as the material is of an epoxy chemical nature and therefore naturally yellow when exposed to UV radiation.

FEATURES AND BENEFITS

MasterTop TC 428 is characterized by:

- monolithic adhesion to the substrate;
- high permeability to water vapor which allows it to be applied even on reinforced concrete floors without a vapor barrier without the risk of bubble formation and detachment due to osmotic pressure;
- excellent aesthetic effect;
- compliance with the principles defined in UNI EN 1504/2 ("Concrete surface protection systems") and the relative acceptance limits. In fact, it protects against the risks of penetration due, for example, to the entry of aggressive agents such as chlorine ions (potential corrosion processes of the reinforcement) and carbon dioxide (responsible for the carbonation of the concrete);
- fire reaction class Bfl-S1, UNI EN 13501;
- chemically resists the spillage of hydrocarbons such as aviation fuel, heating oil, diesel oil, used engine and gear oils, etc.;
- certified as a decontaminable coating for use in nuclear power plants (Cs-137, Co-60);
- certified as a coating for use in clean rooms in accordance with ISO 14644-15
- dielectric: it can in fact be used for the insulation of the heads of the cap beams for the prevention of corrosion from stray currents;
- ease of cleaning and sanitization;
- compliance with the principles of the Legislative Decree of the Government n ° D. Lgs. 193/2007 "EC Regulation 852/2004 concerning the hygiene of food products" (H.A.C.C.P);
- water-based formulation: it is therefore applicable in closed or poorly ventilated environments with minimal discomfort for the applicators.

In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking according to UNI EN 13813 and to UNI EN 1504/2 and the relative DoP (Declaration of Performance).

THEORETICAL COVERAGE

0,4 kg/m^2 (thickness of dry film 200 µm).
Refer to the sheets of the MasterTop 1728, 1728 R, 1720, 1730, 1740 systems.
For light RAL and naturally not very opaque (yellow, orange, pure white for example) provide a primer coat RAL 7035 and then two coats of MasterTop TC 428 of the chosen RAL.

PACKAGING

A + B = 12,3 kg (A 10 kg, B: 2.3 kg).

STORAGE

MasterTop TC 428 must be stored in a sheltered, dry place at a temperature between +10°C and +30°C

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inclusive.

Technical information	
Density	1,3 ± 0,1 kg/liter
Pot life	60 minutes at 20°C
Solids	62 % by weigth 49 % by volume
Mixing ratio	81A / 19B
Application temperature	+8°C e +40°C
Max relative humidity	70%
Recoating time at 20°C	16 – 24 hours
Tack free	6 hours
Walkable	24 – 48 hours
Complete hardening/final set	10 days at 20°C
Air working temperature	- 20° C ÷ 80°C
Thinner and tool cleaning	Clean with soap and water, Thinner E100, alcool

APPLICATION SHEET

For every application detail (preparation of the substrate, primer and other parameters) refer to the technical data sheet of the specific system MasterTop 1728, 1728 R, 1720, 1730, 1740 and to the application manual "MasterTop Industrial Floors Application Manual".

PREPARATION OF THE SUBSTRATE

Before applying the coating, it is essential to check that the concrete surfaces to be protected are not degraded and / or contaminated by oils, greases or other substances, in which case the incoherent and contaminated concrete must first be removed and then restored with MasterTop 514 QD.

MasterTop 514 QD can be overcoated with MasterTop TC 428 after 24 hours.

The cementitious substrate must have a minimum compressive strength class (MPa) equal to:

- C20 / 25 for concrete according to UNI EN 206/1;
- C25 for CT cementitious screeds according to UNI EN 13813.

In the case of screeds of other chemical nature required by UNI EN 13813, such as those based on calcium sulphate CA or magnesite MA or other types, contact the technical service of Master Builders Solutions Italia for further information.

The surface must be prepared by sanding or sanding. Other specific techniques can also be used in specific cases (the choice of the same is to be evaluated following a site visit for which we suggest contacting a Master Builders Solutions technician). The construction and contraction joints must be respected and sealed with MasterSeal NP 474. Dust the surface well before proceeding with the application of the material.

The substrate must be visually dry.

In the case of absorbent substrates or substrates that may have different absorptions from area to area, it is advisable to provide a primer with the specific water-based epoxy primer MasterTop P 686W.

TEMPERATURE

The system must be applied when the ambient temperature remains constant or is decreasing, since this measure allows to reduce the risk of "blowing" related to the escape of the air present in the pores of the concrete.

The temperature of the environment and of the substrate must always be higher than:

- 8°C;
- 3°C with respect to the dew point;

from the moment of application and for at least the following 24 hours.

Before laying, the temperature of the product must be between 15 and 30°C.

MIXING

Mix the two components separately; then pour component B (hardener) into component A (base) homogenizing well with a mechanical mixer at low speed (300 rpm) for about 5 minutes.

APPLICATION

The product can be applied by spraying by airless, by roller or by brush, in two coats. The first coat must be applied with a maximum dilution of 5% with water depending on the absorption of the substrate. Then apply the second coat, respecting the recoating times.

Indoors, it may be necessary to use warm, dry air to complete cure. Protect the film from the direct influence of water for the first 24 hours.

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CLEANING

Tools used for mixing and applying the material can be cleaned with epoxy thinner.

FLOOR CLEANING

For every detail relating to the cleaning aspects of the floor, always refer to the specific document “MasterTop Linea Industrial Cleaning”.

WARNINGS

MasterTop products are for professional use. For further information, consult the Master Builders Solutions Italia Spa area technician.

SAFETY INSTRUCTION

For information on the correct and safe use, transport, storage and disposal of the product, consult the most recent Safety Data Sheet.

OTHER SERVICES

For price analysis, specifications, supplementary brochures, references, reports and technical assistance, visit the website www.master-builders-solutions.com/it-it or contact infomac@mbcc-group.com.

Scan the QR code to visit the product page and download the latest version of this datasheet.

Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.

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