



EmceColor®-flex

Acrylic Polymer modified, Elastomeric, Breathable, Anti- Carbonation, Crack Bridging, UV Resistant Protective Coating for Concrete

Product Properties

- Crack Bridging coating for strained facades and concrete surfaces on the basis of modified pure acrylic dispersion.
- Resistant to carbonation, Water repellent
- Seamless membrane with breathing capacity
- Weathering and ultra violet (UV) resistant
- Solvent free, safe and non-corrosive
- Application by roller or spraying
- Certified in accordance with EN 1504 part 2
- Certified in accordance with IRC SP:80-2008

Areas of Application

- Concrete protection system against aggressive pollutants.
- Carbonation resistant coating for protection of new concrete, repaired concrete, old facades, etc.
- Protective coating for concrete subjected to adverse climatic conditions like in Tunnels, cooling towers, chimneys, bridges, Jetties Etc
- Suitable for marine environment exposed concrete like above the splash zones.
- Protective coating for strained concrete facades due to hair cracks, crazing and shrinkage cracks
- Principle 1,2 and 8: Procedure 1.3.2.2 and 8.2 (EN 1504-9)

Application Notes

General

EmceColor®-flex system is specially designed for protection of concrete. It is an elastic membrane forming material based on acrylic polymers and selected mineral fillers. **EmceColor®-flex** is water based and therefore retains the breathing capacity of concrete

Advantage

The product has low water vapour diffusion and high resistance to diffusion of carbon dioxide. The coating acts as protection against carbonation of concrete or other cementitious facades / elements. The most important characteristic of **EmceColor®-flex** is that it has crack bridging properties, which can be taken advantage of in case of repair and protection to cracked facades, exhibiting hairline and shrinkage cracks

Surface Preparation

A primer coat of **Primex 250** is required for adhesion and sealing of the surface. **EmceColor®-flex** is supplied in white colour. Some shades can be made available for large surface areas. Pigments and color stains can be added to obtain different decorative shades. Two coats are normally recommended under usual conditions. More coats offer higher degree of protection and better crack bridging properties.

Surface preparation should be conducted as per painting rules. Surfaces should be free from oils and fats for better bonding. The surface to be coated must comply with the principles of building construction and should fulfill structural requirements. The surface should be firm, clean, and free from fats, oil, grease, dust or any other contamination

EmceColor®-flex can be used on cracked or crack susceptible surfaces as preventive protection or repair, on rough or smooth

plaster, brickwork and concrete surfaces. The nature of the base and particularly the kind of cracks involved must be analyzed before application. The **EmceColor®-flex** system is suitable for the protection and repair of cracked facades exhibiting so called hair-line cracks and fine shrinkage cracks (within the region of about 0.2 mm crack- width).

Fine cracks of this kind are often detectable only in the presence of moisture so dampen surface before examining dry facades. Such hairline cracks and fine shrinkage cracks are generally to be found on the surfaces only. By application of additional coats of **EmceColor®-flex**, the crack bridging ability of the system can be increased as crack-bridging is a function of the thickness of the coats involved

Flaky old paintwork must be completely removed. Smoothen the base with mortar or **Nafuquick** readymade mortar. Unpainted surfaces should be primed with **Primex 250**, consumption 75-100 g/m². Subsequent coats of **EmceColor®-flex** can be applied by roller, brush or spraying in two coats at a consumption of 400 to 450 gms/m² for a thickness of 200 to 225 microns.

This product is fully compatible with solvent free PCC system for the Protection, Repairs and Maintenance of Concrete Structures. Please request details.

EmceColor®-flex Should not be diluted with water at any circumstances, because dilution with water will affect its performance. **EmceColor®-flex** is supplied as a ready-to-use paste. Mechanical Mixing should be done at site to avoid settlement of heavier minerals in **EmceColor®-flex**, for best coating results.



Technical Data for Emcecolor®-Flex

Characteristic	Unit	Value*	Comments
Solid Content	%	70±2	
Over Coating Time	hour	min. 3 hrs min..6 hrs	For absorbent substrates For non-absorbing substrates
Consumption	Gms/m ²	400-450	For 200 to 225 micron thickness, in two coats
Carbon dioxide Diffusion Coefficient		1.78x10 ⁶	
R Value	m	589	SdCO ₂ >50m
Crack bridging capacity	mm	2.10	
Dynamic crack bridging after Weathering	mm	0.4	
Water Vapour diffusion coefficient	K	1780	
Water Vapour Diffusion S _D	m	0.58	SdH ₂ O<4m as per DIN 52615
Permeability under pressure		0	(as per IS 3085)
Capillary Absorption	Kg/m ² h/½	0.1	
Adhesion	N/mm ²	2.0	
Adhesion after exposure to temperature Change & salinized fog	N/mm ²	1.9	
Adhesion strength after UV exposure	N/mm ²	1.0	
UV resistance		Resistance	No change in Original appearancewhen exposed to 300 hrs
Ultraviolet Rays	Hrs	350	Under xenon are lights. Contrast Level < 5Colorfastness fulfilled

*All the technical Values were determined in laboratory, at a temperature of 20° C and 65% relative humidity

Product Characteristics for Emcecolor®-Flex

Type of Product	Anti-Carbonation, Breathable, Crack Bridging, Flexible and UV Resistant coating for Concrete
Form	Smooth pasty liquid
Colour	White Use universal colour stains to obtain other colours
Shelf Life	9 months from date of Manufacture
Delivery	EmceColor-flex: 40kg; Primex 250: 30kg & 5kg
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

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Note: - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained

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