

**PRODUCT DESCRIPTION**

C-Floor® E240 WB is an epoxy water based coating for floors and concrete surfaces and its main properties are:

- Dust free coating for concrete floors and ceramic surfaces
- High hardness and abrasion resistant
- Good chemical resistance
- High thickness
- Easily cleaned with water
- Tolerant to damp surfaces.
- Fireproof
- Available on 3G Colormix System
- Certification Interior Air Quality
- Certification Excell Plus
- It complies with the LEED V4 building assessment system for low emission materials of volatile organic compounds
- CE Marking product according EN 13813 and EN 1504-2
- Excellent impermeability to chlorides, complies the specification LNEC E468

**INTENDED USES**

Coating for concrete surfaces in food, chemical and pharmaceutical industries, laboratories, hospitals, parking areas and industrial warehouses with medium mechanical requirements. This product can be applied as a primer over ceramic surfaces for high thickness systems with high water impermeability and can be used as a wall coating over cement plasters.

**PROPERTIES**

<b>Finish</b>	Satin
<b>Colour</b>	Red RAL-3009 and grey RAL-7042. Other colours: available on 3G Colour System
<b>Components</b>	2
<b>Mixing ratio (weight)</b>	Resin 7F-241      4 parts Cure 7F-242      1 part
<b>Pot-life</b>	1 hour at 23 °C The useful pot-life of the mixture depends on the temperature and quantities mixed.
<b>Induction Time</b>	10 minutes
<b>Volume solids</b>	66 % (theoretical)
<b>Specific weight</b>	1,62 ± 0,05 g/mL
<b>Dry film thickness</b>	Thickness depends on surface absorption of the concrete. Indicative value: 80 – 100 µm per coat
<b>Number of coats</b>	2 – 4
<b>Application method</b>	Airless spray, brush or roller.

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**Drying times**

At 23 °C and 100 µm:	
Dry for human traffic:	24 hours
Dry for movement of light loads:	48 hours
Complete cure:	7 days
Recoating time:	Min: 24 hours Max: 72 hours

Drying times are dependent on temperature, ventilation and film thickness

**SURFACE PREPARATION****Concrete floors**

The concrete must be left for at least 28 days so as to be fully cured. The surface must be clean, dry and with sufficient roughness, achieved by use of diamond grinding disc machine (CSP 2 grade according ICRI n.º 310.2R) or shot blasting (CSP 3 grade according ICRI n.º 310.2R). The concrete must have a minimal tensile strength of 1,5 N/mm<sup>2</sup>. The product must not be applied on concrete surfaces subject to negative water pressures, unless if applied over the CIN-CS Moisture Barrier 2000.

**Ceramic tiles**

To ensure a better adhesion is recommended to make a mechanical preparation of the tile with a diamond grinding disc machine to remove the glazed of the ceramic tile. The surface must be clean, dry and free from any contamination prior to application of the paint system.

**PAINT SYSTEMS****Concrete floors**

It is recommended that the surface be first sealed with the same product diluted up to 10 %, depending upon surface absorption. Alternatively or to increase the bonding strength of the substrate, it could be applied the C-Floor Varnish E250 WB as a primer.  
Consumption rate: approx. 0,25 kg/m<sup>2</sup>

*Smooth System*

Two coats of C-Floor E240 WB

Total consumption rate (two coats): approx. 0,4 - 0,5 kg/m<sup>2</sup>

*Non-slip system of low rugosity (approx. 0,2 mm)*

Apply the first coat of C-Floor E240 WB diluted 5 % by weight with water.

The preparation of the paint for the final coat should be as follows:

After mixing the two components, add with mechanical agitation 0,15 kg of C-Floor® Anti-Slip Additive (ref. 7S-090) to 1 kg of C-Floor® E240 WB. The product should be diluted 10 % with water.  
Total consumption rate (two coats): approx. 0,4 – 0,45 kg/m<sup>2</sup>

*Non-slip system of medium roughness (approx. 0,5 m)*

Apply one coat of C-Floor E240 WB and, while damp, sprinkle with silica Quartz G300 until saturated. After 24 hours, remove the non-adherent silica. To guarantee a complete colour and gloss uniformity, it's recommended to seal the silica with two coats of paint.

Total consumption rate (three coats): approx. 0,65 – 0,70 kg/m<sup>2</sup>

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## Satin epoxy water based coating for floors and concrete surfaces

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**Ceramic tiles floors**

Apply one coat of C-Floor E240 WB diluted 5 % by weight with water.

Consumption rate: approx. 0,15 – 0,20 kg/m<sup>2</sup>

After 24 to 48 hours, apply the C-Floor E400 SL as a self-levelling mortar, as a non-slip coating system or as a basecoat for coloured silica's schemes. For more information on these schemes, refer to the technical datasheet of C-Floor E400 SL.

**APPLICATION**

Previously stir the *resin* and add the *cure* to *resin* compound and stir the mixture for 5 minutes with a power mixer at low revolutions. In confined areas ventilate with clean air during application and drying.

**Environmental and drying application conditions:**

Temperature	10 – 35 °C
Relative humidity	less than 75 %
Minimum surface temperature	3 °C above dew point and 10 °C as minimum
Product temperature	15 a 25 °C
Substrate humidity	<i>Concrete</i> : less than 5 % according ASTM F2659 and measured with "Tramex" equipment type <i>CIN-Moisture Barrier 2000</i> : the surface humidity must be less than 40 % (measured with a Protimeter equipment type)

**Application Equipment:**

Airless spray	Recommended
Fluid tip orifice size	0,017 – 0,023 inches (0,43 – 0,58 mm)
Fluid pressure	150 -170 kg/cm <sup>2</sup>
Dilution	0 – 5 %
Brush / Roller	
Dilution	5 – 10 %

Ventilation: It is essential to ensure good air circulation around the surface to be painted during application and drying. If not the case then the hardening of the product and its final characteristics (gloss, chemical resistance, etc.) could be seriously impaired.

<b>Thinner and Cleaner:</b>	Water
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**ADDITIONAL INFORMATION**

**Curing mechanism** – By evaporation of water and chemical reaction between the components.

**Volatile Organic Compounds (COV)**

EU limit for this product (cat. A/j): 140 g/L

This product contains max.VOC:

Resin: less than 4 g/L

Cure: 0 g/L

Mixt: less than 3 g/L \*

\* The VOC value shown above refers to a ready for use product, as tinted, thinned, etc in accordance with our recommendations. We are not responsible for products obtained by mixing products with are different from those we have recommended and we must draw attention to the responsibility of anyone involved within the supply chain not to infringe Directive 2004/12/CE.

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**Flash Point (EN 426)**

Resin	Higher than 100 °C
Cure	121 °C
Thinner	Non flammable
Cleaner	Non flammable

**Packaging**

Resin	4 and 20 kg
Cure	1 and 5 kg

**Storage**

Resin: 2 years, when stored indoors in original containers at 5 to 40 °C.  
Cure: 4 years, when stored indoors in original containers at 5 to 40 °C.

**APPROVALS AND MECHANICAL PROPERTIES****Fire Reaction**

Fire reaction classification according to European Norm EN 13501-1: Bfl-s1 (fire reaction with low smoke emission).

**Slip Resistance**

There are available different coatings systems with an anti-slip classification with Class 1 (Smooth System), Class 2 (low rugosity system) and Class 3 (medium roughness system) according to the standard ENV 12633:2003 Annex A. The determination of the "PRV" (Pendulum Test Value) was determined with a "Wessex" pendulum, with a "TRRL Rubber - Slider 55" for wet surfaces, at 23 °C ambient temperature and 50% relative humidity and onto a flat holder. For other test conditions, the values of "PRV" may vary.

**Certification Interior Air Quality**

"Interior Air Quality" classification according to French regulations (Regulation of 19 April 2011 concerning of construction products or coating of walls and floors and the emission of volatile pollutants of paints and varnishes) - A+. Meets the emissions requirements in indoor environment according to Belgian regulation (Royal Decree of 8 May 2014 establishing threshold levels of construction products for certain intended uses).

**Certification Excell Plus**

High level of requirement, that will allow ensuring that emissions of volatile chemical compounds are not likely to cause deterioration by indirect contact of the organoleptic quality of sensitive products or poor comfort life due the presence of particulars contaminants.

Complies with the general requirements applicable to food companies, according Annex II, Cap. I and II of CE Regulations nº 852/2004 from European Parliament and Council of 29.02.2004.

**Wear resistance**

The Taber abrasion resistance is 100 mg (CS10, 1000 cycles, 1000g) according ASTM D4060.

**PROPERTIES****Water vapour permeability**

C-Floor® E240 WB is classified as water vapour permeable paint. Permeability to water vapour (EN ISO 7783-1 and EN ISO 7783-2):  $S_d = 0,6 \text{ m}$  (170  $\mu\text{m}$ ).

**Chemical Resistance**

Test performed according to standard ASTM D1308, method 3.1.2. Drying conditions: 1 week at 23 °C and 50 % HR. The chemical resistance results are only valid for the drying conditions and test method. For other conditions, the chemical resistance results may be different.

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Chemical product	2 hours	1 day	1 week
Sulphuric acid (10 %)	±	±	-
Acetic acid (10 %)	±	±	-
Sodium Hydroxide (10 %)	+	+	±
Sodium Hypochlorite (2,5 %)	±	±	±
Oil's car	+	+	+
Brake fluid	+	±	±
Antifreeze	+	+	+
Diesel	+	+	+
Gasoline without lead	+	+	+
Xylene	+	+	+
Ethanol	±	±	±
Water	+	+	+

+ Unaffected/resistant; ± Light superficial effect (hardness, colour or micro bubbling)

- No resistance

## CE MARKING

CE Marking of this product is the evidence given by CIN that this product is subject to the provisions of Community Directives of the Construction Products that are applicable with European Regulation nº 305/2011 on March, 9 of 2011. This product complies with the requirements referred in the Annex ZA of the European Standard EN 13813. "Screed material and floor sounds – Sound material - Properties and requirements", in line with a compliance system 3.

This product also complies with the requirements referred in the Annex ZA of the European Standard EN 1504-2 "Products and Systems for the protection and repair of concrete structures. Definitions, requirements, quality control and conformity assessment. Part 2: Surface protection systems for concrete", according to the principles 1 (protection against the ingress), 2 (humidity control) and 8 (increased resistivity), in line with a compliance system 3.



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EN 13813 and EN 1504-2 Declaration of performance: CE-7F240	
Continuous floor coating	
Classification	SR – Bfl s1 – B2
Adhesion test	> 2 N/mm <sup>2</sup>
Fire reaction	Bfl-s1
Surface protection products Protection against ingress, humidity control and increasing of resistivity	
Permeability of CO <sub>2</sub>	S <sub>D</sub> > 800 m
Water vapour permeability	S <sub>D</sub> < 1 m (Class I)
Water permeability	S <sub>D</sub> < 0,01 kg/(m <sup>2</sup> .h <sup>0,5</sup> )
Adhesion test	> 2,0 N/mm <sup>2</sup>
Permeability to chlorides	< 10 <sup>-18</sup> m <sup>2</sup> /s
Fire reaction	Bfl-s1
Dangerous substances	Complies with clause 5.3

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## NOTES

1. It should be noted that two pack water based products unlike the equivalent solvent based materials, do not increase their viscosity when the (*pot-life*) has been exceeded, which may cause problems. It is recommended therefore not to apply it beyond the time limit indicated in the technical data sheet, even though the mixture may appear to be in good condition, since its chemical and mechanical characteristics could be affected.
2. To avoid coating scratches should be used rubber covers and wheels and avoid the use rigid plastic covers. It is still recommended to use appropriate waxes for protection and maintenance.
3. To prevent water infiltration between the coating and the support, all joints must be sealed with appropriate sealants to not affect the adhesion of the coating.
4. Due to slight colour variations may occur from batch to batch, it is recommended to be used a single batch on the same application area.

## HEALTH, SAFETY AND THE ENVIRONMENT

Protect the eyes and skin from contact. Gloves, goggles and appropriate clothing should be worn. Keep out of the reach of children. Use only in well ventilated areas. Do not empty into drains. Keep the container properly sealed and stored in the correct place. Take correct measures when transporting the product so as to avoid any accidents that could rupture the can or cause damage to the packaging. Ensure that the container is correctly stacked in a safe area. Do not store or use the product in extreme temperature conditions. Always take account of the appropriate legislation relating to the environmental and Health and Safety at Work. For more information it is essential to read the label on the container and the product Material Safety Data Sheet of this product, its components and all complementary products referred on Technical Data Sheet.

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