



# DE-100/FC/SFC

## Self-Leveling Epoxy Coating System

### DESCRIPTION

DE-100 is a 100% solids, two-component, self-leveling epoxy coating engineered to renew and protect concrete floors while delivering a refined, high-end appearance. It can be pigmented or combined with metallic additives to create opaque, glossy, and visually dynamic decorative finishes. The system offers outstanding mechanical strength, long-term durability, and excellent chemical resistance—all while maintaining its aesthetic appeal. DE-100 is also available in Fast Cure and Super Fast Cure versions to accelerate return-to-service in time-sensitive projects. This coating is ideal for commercial and industrial environments where performance and design quality are equally important.

### ADVANTAGES

- Dense surface resistant to bacteria and moisture
- Easy to clean and maintain
- Excellent adhesion to multiple substrates
- Multiple layers can be applied with excellent inter-coat adhesion

### PRIMARY APPLICATIONS

- Industrial facilities
- Commercial spaces
- Decorative and metallic floors
- Institutional buildings

### Technical Data

<b>Packaging</b>	11.35 L (3 US gal), 56.7 L (15 US gal)
<b>Color</b>	Part A: Upon Request Part B: Clear to Amber
<b>Recommended Thickness</b>	Primer: 6 – 8 mils Finish Coat: 8 – 12 mils
<b>Coverage @ 8 mils</b>	200 ft <sup>2</sup> /gal
<b>Slurry Coverage (12 mils with 50% silica)</b>	125 ft <sup>2</sup> /gal
<b>Trowel Coverage (24 mils with 85% silica)</b>	60 ft <sup>2</sup> /gal
<b>Mix Ratio (by volume)</b>	A : B = 2 : 1 (100:50)
<b>Mix Ratio (by weight)</b>	A : B = 100 : 39 - 45
<b>Gel Time (100 g @ 25°C)</b>	<b>DE-100:</b> 55 – 65 minutes <b>DE-100 FC:</b> - 25 - 30 minutes <b>DE-100 SFC:</b> 10 - 15 minutes
<b>Pot Life (100 g)</b>	<b>DE-100:</b> N.A <b>DE-100 FC:</b> - 10 - 15 minutes <b>DE-100 SFC:</b> 5 - 10 minutes
<b>Solids Content</b>	100% by weight and volume
<b>VOC (g/L)</b>	31 - 45
<b>Thinner Recommended</b>	Xylene
<b>Shelf Life</b>	12 months (unopened, away from extremes)
<b>Viscosity @ 25°C (cP)</b>	Clear: A: 1200 – 1400, B: 200 – 400, Mix: 1500 – 1800 Colored: A: 1500 – 1900, B: 200 - 400, Mix: 2300 – 2500
<b>Specific Gravity</b>	Clear: A: 1.10 – 1.15, B: 0.9 – 1.0 Colored: A: 1.15 – 1.20, B: 0.9 – 1.0

### Physical Properties @ 23°C (73°F), 50% R.H.

<b>Bond Strength (ASTM D4541)</b>	>300 psi (substrate rupture)
<b>Water Absorption (ASTM D570)</b>	0.3 %
<b>Abrasive Resistance (ASTM D4060)</b>	0.10 g (CS17, 1000g, 1000 cycles)
<b>Tensile Strength (ASTM D638)</b>	6500 psi
<b>Compressive Strength (psi) (ASTM D695)</b>	12000 – 13000 psi
<b>Coefficient of Friction (ASTM D1894)</b>	0.5 – 0.7
<b>Fire Rating (CAN/ULC S102 / ASTM E84)</b>	Flame Spread: 5; Smoke Developed: 94 (Class A)



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### DE-100 Curing Details

Temperature	Foot Traffic	Light Traffic	Full Cure
10°C (50°F)	N.A	N.A	N.A
20°C (68°F)	1 day	3 days	7 days
30°C (86°F)	16 hours	2 days	5 days

Recoat Window	Minimum	Max
10°C (50°F)	N.A	N.A
20°C (68°F)	8 hours	24 hours
30°C (86°F)	6 hours	24 hours

### DE-100 FC Curing Details

Temperature	Foot Traffic	Light Traffic	Full Cure
10°C (50°F)	N.A	N.A	N.A
20°C (68°F)	1 day	2 days	7 days
30°C (86°F)	12 hours	36 hours	5 days

Recoat Window	Minimum	Max
10°C (50°F)	N.A	N.A
20°C (68°F)	6 hours	24 hours
30°C (86°F)	3 hours	24 hours

### DE-100 SFC Curing Details

Temperature	Foot Traffic	Light Traffic	Full Cure
10°C (50°F)	2 days	5 days	10 days
20°C (68°F)	1 day	2 days	7 days
30°C (86°F)	12 hours	24 hours	5 days

Recoat Window	Minimum	Max
10°C (50°F)	36 hours	2 days
20°C (68°F)	2 hours	24 hours
30°C (86°F)	1 hour	24 hours

## SURFACE PREPARATION

### Old Concrete

Concrete surface must be cleaned and mechanically prepared using shotblasting, sand blasting, and/ or diamond grinding. All oils, sealers, curing agents, waxes and fats must be removed prior to product application. Do not apply onto wet substrates. Chloride, moisture, and pH levels should be checked prior to application. Primer is suggested prior to application on porous concrete substrates. All cracks and substrate imperfections should be filled and repaired with Epoxy Crack Repair prior to application.

### New Concrete

New concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 MPa (3625 lbs./inch<sup>2</sup>) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs./inch<sup>2</sup>). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. DE-100 primer should be used to

seal porous concrete surfaces prior to application. All cracks and substrate imperfections should be filled and repaired with Epoxy Crack Repair prior to application.



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### MIXING

Materials should be pre-conditioned to a minimum of 10°C prior to use. Thoroughly mix each component separately using paddle mixers and a drill for a minimum of 2 minutes to place the solids content evenly in suspension. Pour component B into component A using the proper mixing ratio of 2A:1B by volume. Mix both components for at least 3 minutes using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

### APPLICATION

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

### CLEANING

Clean all tools and materials with the cleaner/thinner for epoxies. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

### RESTRICTIONS

- Minimum/Maximum temperature of substrate: 15°C / 30°C (59°F / 86°F).
- Maximum relative humidity during application and curing: 85%.
- Substrate temperature must be 15°C (59°F).
- Humidity content of substrate must be <4 % when coating is applied.
- Do not apply on porous surfaces where a transfer of humidity may occur during application.
- Avoid exterior use on substrates at ground level.
- Protect from humidity, condensation and contact with water during the 24-hour initial curing period.
- Surface may discolor in areas exposed to regular ultraviolet light.

### HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult a physician. For respiratory irritations, move affected person outdoors to fresh air. Remove contaminated clothes and wash before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke irritation. Avoid eye contact. Contact with product may cause severe burns. Avoid breathing vapors released from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Always work in a properly ventilated area.

*\*Consult the material safety data sheet for further information.\**

### IMPORTANT NOTICE

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