



UNIFLEX
FLOOR COATINGS

TECHNICAL DATA SHEET

January, 2025

DESCRIPTION

UNI-100 is a 100% solid, two component, self-leveling epoxy coatings designed to restore floor concrete and improve their appearance. It can be colored or mixed with various colors or metallic powder to deliver opaque and glossy finish floors. They show excellent mechanical properties and chemical resistance. It has very good resistance to crystallization and durability while maintaining its artistic look. These systems comply with the Canadian Food Inspection Agency (C.F.I.A.).

ADVANTAGES

- Dense surface resistant to bacteria, moisture and is easy to clean.
- May apply several layers onto itself with excellent adhesion.
- Excellent adhesive properties allow application onto many different types of substrates.

TECHNICAL DATA

Packaging		11.35 L (3.5 US gal.)		
Color		Part A Upon Request	Part B Clear to Amber	Mix Upon Request
Recommended Thickness		Primer	6-8 mils	
		Finish Coat	8-12 mils	
Mileage per gallon (8 mils thick)		200 ft²		
Mileage for Slurry Application (50% Silica Sand) (12 mils thick)		125 ft²		
Mileage for Trowel Epoxy Application (85% Silica Sand) (24 mils application)		60 ft²		
Shelf Life		12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.		
Mix Ratio, by volume Clear/Colors		A: B = 2:1 (100:50)		
Mix Ratio, by weight Clear/Colors		A: B = 100:39:45		
Gel time (100g)		55-65 minutes		
Solids Content, by weight		100%		
Solids Content, by volume		100%		
VOC (g/L)		45		
Specific Gravity Clear Colors		Part A	Part B	Mix
		1.14 - 1.16	0.9 - 1.0	--
		1.15 - 1.20	0.9 - 1.0	--
Thinner Recommended		XYLENE		
Recoat		Substrate Temp	Minimum	Maximum
		± 10 °C / 50°F	N.A	N.A
		± 20 °C / 68°F	8 hours	24 hours
		± 30 °C / 86°F	6 hours	24 hours
Curing Details	Substrate Temp	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

PROPERTIES @ 23°C (73°F) and 50% R.H.

Bond Resistance (psi), ASTM D4541	>300 (substrate ruptures)		
Permeability (%), ASTM D570	0.3 %		
Abrasive resistance, ASTM D4060 (CS17 / 1000 cycles / 1000 g)	0.10 g		
Viscosity @ 25°C Clear Colors	Part A	Part B	Mix
	2500-2700	200 - 400	1500-1800
	2500-3200	200 - 400	1300-1600
Tensile strength (psi), ASTM D638	6500		
Compressive Strength (psi MPa), ASTM D695	12000-13000		
Elongation (%), ASTM D638	6-7%		

***Please note, that the indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same surface.**

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. UNI-801 primer is suggested prior to application on porous concrete substrates. All cracks and substrate imperfections should be filled and repaired with UNI-4400 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./inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs./inch²). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. UNI-100 primer should be used to seal porous concrete surfaces prior to application. All cracks and substrate imperfections should be filled and repaired with UNI-4400 prior to application.

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**

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of UNIFLEX FLOOR COATINGS. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. UNIFLEX FLOOR COATINGS. assumes no legal responsibility for use upon these data. UNIFLEX FLOOR COATINGS. assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.