



# *Technical data sheet*

October 11, 2024

# FT-MVB-FC

## Fast-Cure Epoxy Coating System Self-Leveling 100% Solids, VOC Compliant

DESCRIPTION	FT-MVB-FC is a 100% solid, two component fast cure moisture vapor barrier epoxy coating, component, designed to be used as a moisture vapor retarder for concrete and a variety of finished floor coverings such as vinyl tiles and sheeting, hard wood etc. It can be used as a primer, bonding agent as well as top coat. It provides some fast-curing speed at ambient and low temperature conditions. It also exhibits excellent mechanical properties. FT-MVB-FC controls moisture vapor emission rates up to 25 lb. /24 hr. /1000 square feet while providing excellent mechanical properties and good chemical resistance.			
ADVANTAGES	<div>■ Dense surface resistant to bacteria, moisture and is easy to clean.</div> <div>■ May apply several layers onto itself with excellent adhesion.</div> <div>■ Excellent adhesive properties allow application onto many different types of substrates.</div>			
TECHNICAL DATA	Packaging	11.35 L (3 US gal.) and 56.7 L (15 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 (100 g)	40-50 Minutes @ 25°C (77°F)		
Pot Life (100 g)	40-50 minutes @ 25°C (77°F)			
PROPERTIES @ 23°C (73°F) and 50% R.H.	Solids Content, by weight	100%		
	Solids Content, by volume	100%		
	VOC (g/L)	23		
	Specific Gravity <div>Clear</div> <div>Colors</div>	Part A	Part B	Mix
		1.14	0.9 - 1.0	--
		1.15 - 1.20	0.9 - 1.0	--
	Thinner Recommended	XYLENE		
	Bond Resistance (psi), ASTM D4541	> 300 (substrate ruptures)		
	Moisture Vapor Emission Rate ASTM E96	25 lb. /24 hr. /1000 square feet		
	Hardness (Shore D), ASTM D2240	85-90		
	Abrasive resistance, ASTM D4060 (CS17 / 1000 cycles / 1000 g)	0.10 g		
Viscosity @ 25°C <div>Clear</div> <div>Colors</div>	Part A	Part B	Mix	
	1200 - 1400	200 - 400	1500-1800	
	1500-1900	200 - 400	2300-2500	



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	Overcoat		Substrate Temp	Minimum	Maximum
			± 10 °C / 50°F	36 hours	2 days
			± 20 °C / 68°F	12 hours	1 day
			± 30 °C / 86°F	6 hours	1 day
	Curing Details	Substrate Temp	Foot Traffic	Light Traffic	Full Cure
		± 10 °C / 50°F	2 days	3 days	10 days
		± 20 °C / 68°F	1 day	2 days	7 days
		± 30 °C / 86°F	24 hours	1 day	5 days
	Tensile strength (psi), ASTM D638		5500		
	Compressive Strength (psi MPa), ASTM D695		6800		
	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 area.\***



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<b>SURFACE PREPARATION</b>	<p><b>Old Concrete</b> 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. All cracks and substrate imperfections should be filled and repaired with FT-ECF prior to application.</p> <p><b>New Concrete</b> 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. If cracks and substrate imperfections should be filled and repaired with FT-ECH prior to application.</p>
<b>MIXING</b>	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.
<b>APPLICATION</b>	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.
<b>CLEANING</b>	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.
<b>RESTRICTIONS</b>	<ul style="list-style-type: none"> <li>■ Minimum/Maximum temperature of substrate: 15°C / 30°C (59°F / 86°F).</li> <li>■ Maximum relative humidity during application and curing: 85%.</li> <li>■ Substrate temperature must be 15°C (59°F).</li> <li>■ Humidity content of substrate can be over 4 % when coating is applied.</li> <li>■ Do not apply on porous surfaces where a transfer of humidity may occur during application.</li> <li>■ Avoid exterior use on substrates at ground level.</li> <li>■ Protect from humidity, condensation and contact with water during the 24-hour initial curing period.</li> <li>■ Surface may discolor in areas exposed to regular ultraviolet light.</li> </ul>
<b>HEALTH AND SAFETY</b>	<p>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.</p> <p>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.</p> <p><b>*Consult the material safety data sheet for further information.*</b></p>
<b>IMPORTANT NOTICE</b>	All statements, recommendations and technical information contained in this document are accurate to the best knowledge of Freedom Coatings Canada Corp. 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. Freedom Coatings Canada Corp. assumes no legal responsibility for use upon these data. Freedom Coatings Canada Corp. 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.

