



SCI-100-MVB

Vapor Reduction Membrane

PRODUCT DESCRIPTION SCI-100-MVB is a 100% solid, two component epoxy coating, made to control the moisture vapor emission rate on deteriorated or new floors. This coating will control moisture vapor emission rates up to 25 lb. /24 hr. /1000 square feet. SCI-100-MVB provides excellent physical and chemical resistance while maintaining its aesthetics. This system has been approved by the Canadian Food Inspection Agency and meets LEED standards.	
APPLICATIONS SCI-100-MVB is formulated as a high solids system for classrooms, laboratories, mechanical rooms, areas of light manufacturing, where cleanliness and easy maintenance are required.	ADVANTAGES <ul style="list-style-type: none"> ▪ Low odour, Solvent-free, low VOC content ▪ 100% solids with an esthetic high gloss finish ▪ Superior mechanical resistance ▪ Good chemical and physical resistance ▪ Easy to clean, bacteria and moisture resistant surface
PACKAGING SCI-100-MVB is packaged in factory proportioned packaging for easy handling and mixing. Resin (R): 2.0 US Gal Hardener (H): 1.0 US Gal	STORAGE All SEALCHEM components should be stored in dry, temperature controlled areas between 12-28 °C. Do not expose to freezing or excessive high heat.
COLOURS SEALCHEM STANDARD COLORS	

TECHNICAL DATA @ 25 °C			
% SOLIDS BY WEIGHT	100%	VOC CONTENT	<15 g/litre
POT LIFE	35 – 40 Minutes	MIXING RATIO BY VOLUME	2:1
RECOMMENDED THICKNESS	18 mils / 90-100 ft² us gal	RECOAT TIME (MIN/MAX)	8 Hours / 24 Hours
RECOMMDED THINNER	Xylene	DENSITY PART A:	1.10
		PART B:	0.99
		MIXTURE:	1.06
FOOT TRAFFIC	24 Hours	LIGHT TRAFFIC	3 Days
FULL CURE	7 Days	SHELF LIFE	12 Months unopened
BOND RESISTANCE ASTM D4541	268 psi	PERMEABILITY ASTM D570	0.3%
COMPRESSIVE STRENGTH ASTM D695	6800	ABRASION RESISTANCE ASTM D4060 (CS17/1000 cycles/ 1000 g)	0.10 gram
HARDNESS (SHORE D) ASTM D2240	85-90	ELONGATION ASTM D638	6.7%

VISCOSITY PART A:	1200-1400 cps	VAPOR PERMEANCE	0.1 US perm
PART B:	200-400 cps	@ 18 MILS THICKNESS	
MIXTURE:	700-900	ASTM E96	
MVER/RH @ 18 MILS THICKNESS ASTM F1869	25 lb. /24 hr. /1000 square feet		
PRIOR TO USE APPLICATOR MUST ALWAYS READ AND FOLLOW WARNINGS AND INSTRUCTIONS ON SEALCHEM INDUSTRIES MOST UP TO DATE PRODUCT TECHNICAL DATA SHEETS, PRODUCT LABELS AND MATERIAL SAFETY DATA SHEETS WHICH ARE AVAILABLE UPON REQUEST BY CALLING TECHNICAL SUPPORT DEPARTMENT.			

SURFACE PREPARATION

Surface must be clean, sound and dry. Prior to coating a floor all trowel marks and surface imperfections must be removed to produce a smooth & uniform surface. Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrate must be dry and free of all wax, grease, oils, fats, soil, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application.

MIXING

SCI-100-MVB is supplied in factory proportioned quantities, greatly reducing the risk of applicator error during mixing.

Step 1 - Mechanically premix PART A (resin) with an appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute.

Step 2 - Slowly empty entire content of PART B into container holding PART A and continue to mix slowly for 3 minutes until uniform consistency in texture and color is achieved. Avoid unnecessary entrapment of air during mixing. Make sure to scrape walls and bottom of container with straight edged trowel at least once to ensure homogeneous mix. Make sure to empty **ALL** contents of PART B into PART A to avoid system weakening or incomplete curing.

DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.

POT LIFE

After mixing, **SCI-100-MVB** has a pot life of approximately 35-40 minutes at 25 °C. Pot life depends on ambient and surface conditions.

APPLICATION

SCI-100-MVB should be applied at temperatures between 15-28 °C and humidity below 80%. **SCI-100-MVB** is applied with a rubber squeegee and back rolled with a 10mm lint-free nap roller (on smooth surfaces) to remove squeegee lines and smooth out coating. Additional coats may be applied when surface is tack-free (roughly 8 hours). Do not exceed first 24 post-application hours for recoating. By exceeding this 24 hour recoat time limit, the entire surface must be lightly sanded to achieve desired profile for a proper mechanical bond. Clean up all dust and debris created by aforementioned sanding prior to applying subsequent coat.

CURING

SCI-100-MVB is tack-free in approximately 8 hours at 25 °C. Coated area may be put back into service after 24 hours. Curing is complete and full product characteristics are achieved after 10 days. Curing times dependent upon ambient & surface conditions.

PRECAUTIONS & LIMITATIONS

Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point.

Substrate Moisture: Moisture within substrate must be $\leq 4\%$ by mass as measured by Tramex® type concrete moisture meter on mechanically prepared surface.

Dew Point: AVOID CONDENSATION. The substrate must be at least 3 °C above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion. Avoid situations where substrate temperature is considerably lower than ambient temperature.

Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water. Use only in well ventilated areas.

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