Technical data sheet

November 28, 2023
Revision #3

SCI COATINGS INC. • 8320 GRENACHE, ANJOU (QC) H1J 1C5, CANADA
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SCI-100 M200

100% Solid Waterproofing Membrane

DESCRIPTION

SCI-100-M-200 is 100% solid, two component, liquid epoxy-polyurethane hybrid waterproofing membrane. They are designed as seamless material to protect concrete from water infiltration while showing excellent mechanical properties such as tensile strength, elongation and tear resistance. This system complies with the Canadian Food Inspection Agency (CFIA).

ADVANTAGES

- Dense surface resistant to bacteria and moisture and easy to clean
- May apply several layers on itself
- Contains low VOC (78.9 g/L), allowing for interior application without harmful odors
- Excellent adhesive properties, allowing application on different substrates.
- Meets LEED standards
- Has 20% elongation

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** 16 - 20 mils		
	Finish Coat 10 - 16 mils		
Mileage per gallon (8 mils thick)	200 ft^2		
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	A: B = 2:1 (100:50)		
Mix Ratio, by weight Clear	A: B =100: 41 - 48		
Colors	A: B =100: 39 - 45		
Pot Life (454 g)	20 - 30 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)	45		
Specific Gravity	**Part A**	**Part B**	**Mix**
Clear	1.14 - 1.16	0.9 - 1.0	--
Colors	1.15 - 1.20	0.9 - 1.0	--
Thinner Recommended	XYLENE		
Bond Resistance (psi), ASTM D4541	> 300 (substrate ruptures)		
Permeability (%), ASTM D570	0.3%		
Hardness (Shore D), ASTM D2240	35-45		
Abrasive resistance, ASTM D4060 (CS17 / 1000 cycles / 1000 g)	0.10 g		
Viscosity @ 25°C	**Part A**	**Part B**	**Mix**
Clear	3500-4500	350-425	1500-1900
Colors	2500-3500	350-425	1500-1900
Tensile strength (psi), ASTM D638	2200-2400		
Compressive Strength (psi MPa), ASTM D695	N.A		
Elongation %, ASTM D638	70-75%		

***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.*

Overcoat	**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

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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 to wet substrates. Chloride, moisture, and pH levels should be checked prior to application. SCI-801 primer is suggested prior to application on porous concrete substrates. **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^2) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs./inch^2). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. SCI-100-M30 primer should be used to seal porous concrete surfaces prior to application.
MIXING	Materials should be pre-conditioned to a minimum of 15°C (59°F) 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.***
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