

SPRAYABLE RUBBER MEMBRANE



Product Data Sheet
Edition 05.2010
Premier Rubber Membrane®



PREMIER RUBBER MEMBRANE®

Cold Spray, Rubber Membrane

Description

The **Premier Rubber Membrane®** system is a modified asphalt emulsion system using exact formulated polymers providing unique elastomeric performance. This product is engineered to achieve a seamless monolithic membrane that will bond 100% to most construction materials. This environmentally responsible, cold spray applied, dual component material is:

- ❖ SAFE TO USE (NO HOT POTS OR KETTLES)
- ❖ FREE OF V.O.C's
- ❖ WATER BASED
- ❖ FREE OF NOXIOUS ODORS
- ❖ NON-TOXIC

Where to Use

Premier Rubber Membrane® is recognized as a Ballast Tank maintenance coating, by Lloyds Register under Certificate No. **MATS/3780/1**. This premier material is also recommended for use on grade, above and below grade, interior and exterior applications. Premier Rubber Membrane® was designed to bond to most known substrates found in the **Construction, Civil, Water Utilities, Waste Water, Mining, Agricultural, Aquaculture, Automotive, Safety, Industrial, Military, Protective, Commercial/ Residential** industries.

Advantages

Premier Rubber Membrane®

- ❖ **Environmentally Friendly:** Zero V.O.C's emitted in the spray application. Meets and or exceeds all parameters set forth by the EPA.
- ❖ **Ease of Application:** Product is applied economically when using Cantex Coatings Ltd. manufactured equipment. No hot pots or trailers of hot tar being towed to job site.
- ❖ **Cost Efficient:** Install times are greatly reduced compared to conventional roll out or liquid materials. Will decrease labor costs.
- ❖ **Performance:** The outstanding coefficient of expansion and contraction allow for bonding and conformity to irregular surfaces.
- ❖ **Dependability:** System is monolithic without seams or overlaps that would compromise the functionality of the product.
- ❖ **Water Tracking Elimination:** Water tracking is eliminated when product is applied properly and fully bonded to the substrate.

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- ❖ **Membrane Strength:** Risk of mechanical fastener damage is eliminated, as there are zero mechanical fasteners used in this products application.
- ❖ **Curability:** In a matter of seconds the curing can be visibly seen. The **Premier Rubber Membrane®** will cure 80% immediately with full cure reached with in 72 hours.

Testing Data

TEST NAME	ASTM NUMBER	RESULTS
Adhesion to Concrete Substrate	ASTM D903 - 98 (2004)	PASSED*
Adhesion to Steel Substrate	ASTM D903 - 98 (2004)	PASSED*
Adhesion to Wood Substrate	ASTM D903 – 98 (2004)	PASSED*
Hydrostatic Resistance (positive side)	ASTM 5751 – 00	> 350PSI**
Hydrostatic Resistance (negative side)	ASTM 5751 – 00	> 350PSI**
Resistance to Puncture	ASTM E154-99- Sect.10	> 34 N***
Freeze – Thaw Resistance (100 cycles)	ASTM A742	PASSED****
Elongation at break at -5.6° C	ASTM D412 – 98a (2002)	480%
Elongation at room temperature	ASTM D412 – 98a (2002)	1200%
Low Temperature Brittleness @15°C	ASTM D746 - 04	PASSED
Water Absorption	ASTM D570 – 98 (2005)	<1.4
Water Vapor Transmission (grains/hr/ft ²)	ASTM E96-00	0.12
Water Permeance (grains/hr/ft ²)	ASTM E96-00	0.23
Crack Bridging @-5°C	ASTM C1305 - 06	PASSED
Resistance to Puncture	ASTM E154-99- Sect.10	> 34 N***
Resistance to Plastic Flow at Elevated Temperature	E154-99- Sect.11	<0.4
Low Temperature Flexibility @-15°C	D1970-01	PASSED
Salt Fog	ASTM B177 - 90	PASSED
TCLP Leachate Test- Dry	O.REG.558	PASSED
Leachate Test- Submersed in Water	ISO 2812	PASSED
Fire Rating	ASTM E109 - 94	Class C
Fire Rating Ballasted Roof	ASTM E109 – 94	Class A
Soil Burial	ASTM E154 - 99	PASSED
WVT after Soil Burial(grains/hr/ft ²)	ASTM 154-99- Sect 11	<0.4
Methane Gas Resistance	ASTM D1434-82(1992)	Equivalent to 1/8" EPDM
Low Temperature Flexibility@-15°C	ASTM DI970-01 SEC 7.6	PASSED
Resistance to Plastic Flow	ASTM E154-99	PASSED
Resistance to UV Exposure	ASTM G90	ONGOING 5+ YEARS

*No delamination could be observed for the tested substrates as the membrane

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elongation had reached the capacity of the dynamometer (Constant Rate extension (CRE) Speed: 305mm/min)

** No bursting of samples was possible as the apparatus had reached its maximum distance (Mullen Type Tester "HAH")

*** The Maximum membrane deformation was not achieved as the membrane elongation had reached the capacity of the dynamometer (Constant Rate of Extension (CRE) Speed: 6mm/min).

**** Meets Criteria- No spalling or disbondment

NOTE: The test results published are typical results of the Premier Rubber Membrane® material at a 60mil dft thickness. All results reflect Laboratory controlled testing. Results may vary, based on application thickness, controlled by the final application of the Premier Rubber Membrane® product.

Chemical Resistance

Premier Rubber Membrane® has excellent resistance characteristics to many different chemical. Contact manufacturer or distributor for a complete listing.

How To Use

Surface Preparation

All grease, oils, latency, and foreign deposits shall be removed from all surfaces to which the ***Premier Rubber Membrane®*** will come in contact.

Any substrates shall be roughened to the extent that it does not present a smooth surface, which would impede the bond of the membrane to the substrate. All dust, loose particles, flaking coatings shall be removed by sandblasting, water blasting or other suitable means. (Refer to Cantex Coatings Ltd. Training Manual for further information). So substrate surfaces may require mechanical roughening to ensure proper bond of the membrane. (Consult your Cantex representative)

All free-standing water shall be removed from surfaces prior to application and allowed to sufficiently dry (damp is acceptable). All detail work and Geo Tape® applications shall be completed before application of membrane can be started.

Mixing

Premier Rubber Membrane® shall be mixed for no less than 30 minutes for a 55 gallon drum, 45 minutes for a 275 gallon tote, using an appropriate mixer (not exceeding 500 rpm) and proper mixing paddle.

Application

Premier Rubber Membrane® is applied using a specifically designed piece of equipment that allows the material to atomize mid air and start to catalyze before coming in contact with the substrate. The material must be mixed prior to and during its application to ensure proper disbursement of all the elastomeric components added.

Curing

Premier Rubber Membrane® will dry to touch almost immediately and reach a full cure within 72 hours at 70°F with a relative humidity of 50%. While curing water droplets will form on the membrane, this is the Calcium Chloride expelling the water that was used to carry it to the atomization of the two components.

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Clean Up

Recommended that baby oil be used for personal clean up. Mineral spirits for equipment and tools.

Caution

Premier Rubber Membrane[®] contains zero V.O.C's yet it is still recommended that proper protective clothing, gloves and breathing filters are used while applying and handling this material.

First Aid

Wash off with soap and water, or use baby oil to remove from skin. If ingested consult a physician. Never use Gasoline for any clean up. For more information, consult Cantex Coatings Ltd. Material Safety Data sheet.

KEEP OUT OF REACH OF CHILDREN

THIS PRODUCT IS INTENDED FOR PROFESSIONAL USE ONLY

The information, and in particular, the recommendation relating to the application and end-use of Cantex Coatings Ltd. products, are given in good faith based on the most current knowledge and experience of the products when properly prepared, stored and used under normal conditions with in the specified shelf life. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from all this information, or from any recommendations, or from any other advice offered. All orders are accepted subject to our current terms of sale.

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