

PREMIER RUBBER MEMBRANE®

Cold Spray, Rubber Membrane

Technical Datasheet

Product 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 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 odours
- ❖ 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** and **Commercial/Residential** industries.

Advantages:

- ❖ Zero V.O.C.s
- ❖ No hot pots or trailers
- ❖ Cost efficient – reduced application times
- ❖ Performance – outstanding coefficient of expansion and contraction allows for bonding and conformity to irregular surfaces
- ❖ Monolithic without seams
- ❖ Water tracking is eliminated
- ❖ Zero mechanical fasteners used
- ❖ Product cures 80% immediately and full cure in 72 hours
- ❖ Resistant to many chemicals (contact Cantex for a complete listing)

Substrate Preparation:

- ❖ Substrates must be free of all dirt, dust, grease, oil, sealers, curing compounds, form release agents, laitance and loose toppings.

- ❖ Only proceed with application when the temperatures remain between 40°F and 90°F (4°C and 32°C) and protect from freezing for 24 hours after application.
- ❖ All surfaces to be coated should be dry (damp is acceptable with no standing water). Hot surfaces should be cooled and shaded while cold surfaces should be heated and sheltered.
- ❖ For proper adhesion, concrete substrates must have a minimum CSP-3 Concrete Surface Profile as per ICRI Guideline No. 310.2-1997 (Formerly Guideline No. 03732).
- ❖ All loose particles and/or flaking coatings must be removed by sandblasting, water-blasting or other mechanical means.
- ❖ All detail work and tape application must be completed before application of membrane can be started.

Mixing:

For best results, mechanically mix for no less than 30 minutes for a 55 gallon drum and 45 minutes for a 275 gallon tote. Mix at slow speeds (not exceeding 500 rpm) to prevent air from entering the mix.

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 the elastomeric components added.

Curing:

Dries to the touch almost immediately and reaches 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.

Clean-up:

Promptly wash hands with baby oil. Clean tools and equipment with Mineral Spirits before material dries. Cured material must be removed mechanically.

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Safety:

Premier Rubber Membrane® contains zero V.O.C.s yet it is still that proper protective clothing, gloves and breathing filters are used when 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 Material Safety Data Sheet.

Note:

Proper application is the responsibility for the user. Field visits by Cantex personnel are for the purpose of making technical recommendations and not for supervising or providing quality control on-site.

Testing Data:

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	> 350 PSI**
Hydrostatic Resistance (negative side)	ASTM 5751 – 00	> 350 PSI**
Resistance to Puncture	ASTM E154-99- Sect.10	> 34 N***
Freeze – Thaw Resistance (100 cycles)	ASTM A742	PASSED****
Elongation at break @ -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/ft²)	ASTM E96-00	0.12
Water Permeance (grains/hr/ft²)	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/ft²)	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 elongation had reached the capacity of the dynamometer (Constant Rate of 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.

**For Professional Use Only
Keep Out of Reach of Children**