

PPC Base Membrane 921 WT

PRODUCT TECHNICAL DATA SHEET

PPC Base Membrane 921 WT A two-component, fast-curing, low-odor, NSF-approved, liquid-applied aromatic polyurethane membrane, asphalt-extended for enhanced performance. It adheres to most substrates to create a durable, waterproof barrier. Use the appropriate product grade to ensure compliance with all applicable VOC regulations at the installation site.

WHERE TO USE

- Corrosion Protection
- Tank Liners
- Containment
- Pond Liners
- Waterproofing
- Potable Water Containment/Storage
- Bridges

ADVANTAGES

- Bonds cracks and joints
- Economical
- VOC Compliant
- Impervious to Water and Various Aqueous Chemicals
- UV Stable (color fades)
- Proven Protection
- Seamless Waterproof Membrane

THEORETICAL COVERAGE RATES

50 sq ft. per gallon at (32 WTF)

PACKAGING & COLORS

Black – Fades to dull black

Sizes: 4.5 US gal (17 Liter): 2Gal jar containing net 0.45gal (1.70 liters) of Side-A and 5 Gal pail containing net 4.05gal (15.30 liters) of Side-B

MIX RATIO

PPC Base Membrane 921 WT is mixed with a mechanical mixer, never by hand. First premix Side-B material completely to attain a uniform color. Pour Side-A into Side-B slowly while mixing, mix for 3-4 minutes. Mix slowly and carefully do not allow the entrapment of air into the mixture. PPC Base Membrane 921 WT CANNOT BE DILUTED AND YOU CANNOT ESTIMATE PROPORTIONS ARE PREMEASURED.

SHELF LIFE AND STORAGE

12 months from the date of manufacture in original unopened factory sealed containers when kept indoors at a temperature between 60F to 95F (15C-35C).

PHYSICAL/CHEMICAL CHARACTERISTICS AT

ANSI/NSF 61 Approved up to	140°F(60°C)
Elastomeric Waterproofing	ASTM C-836 Exceed
	ASTM C-957 Exceed
Total Solids by Volume, ASTM D-2697	89%±2%
Volatile Organic Compounds ASTM D-2369-81	87 gm/liter
Mullen Burst Strength, ASTM D-75	155psi (no break)
Tensile Strength, ASTM D-412, 100mil Sheet	900±100psi
Tear, ASTM D-624	150±50psi
Extension to Break, ASTM D-412	450±100%
Membrane Weight, 60 mils	approx. 30lbs/100 sqft
Recovery from 100% extension	After 5 mins 98%
	After 24 hours 100%
Crack Bridging	
10cycles @-15°F(-26.1°C) >1/8" (0.3175cm)	
After Heating Aging >1/4" (0.65cm)	
Weathering, ASTM D-822	Pass 5000hrs
Softening Point, Ring Ball, ASTM D-36	>400°F (205°C)
Deflection Temp., ASTM D-648	PASS
Service Temperature	-60 to 200°F (-51-to 93.3°C)
Hardness, ASTM D-2240 @ 77°F (25°C) Shore A	60 ± 5
Permeability to Water Vapor ASTM D-96 method	0.06 perm
E 100°F (37.5°C), 100 mil sheet (254 microns)	
Abrasion Resistance – Wt. Loss	7.2 mg loss
Taber Abraser CS-17 Wheel,	
1000 gr./1000 re., ASTM D-4060	
Electrical Resistivity, ASTM D-257,	3.86 x 10 ¹⁴ ohm. cm
50% R.H. @ 75°C (23°C), 2" (50 mm)	
disc,100 mil (2.5 mm) thickness	
Adhesion to Concrete (dry) Elcometer	350 psi (2.07 Mpa)
Working Time (Pot Life) @ 77°F	18-20 min
Set Time to Polyurethane Film hours,	4 Hours max
ASTM -D164 procedure 5.3.2	
Time to Reach 20 Shore A Hardness,	24 Hours Max
@ 77°F (25°C), 200-gram quantity	

OVERVIEW OF INSTALLATION STEPS

Mandatory Mockup: A 100-200 sq/ft mockup should be installed as a guide for installation and quality control panel days or weeks before the actual installation of the coating system. The mockup should be approved by an authorized representative of the Property Management for Slip Resistance, aesthetics, and functionality.

Surface Preparation

Concrete surfaces must have a medium sandpaper-like finish, equivalent to an ICRI CSP #3 or greater. Surface preparation can be completed by shot blasting no grinding or surface profile is needed when **Premera FP1 Fusion Primer** is used. Peel and adhesion testing is recommended. Install a mock-up of approximately 100–200 sq ft (9.30–18.58 sq m) of the system and obtain approval for appearance, color, slip resistance, coverage rates, and overall performance before proceeding.

Joints, Cracks, and Flashing

Allow new concrete to be cured for a minimum of 30 days. The compressive strength should reach at least 25 MPa (3,625 psi) after 28 days, with a minimum tensile strength of 1.5 MPa (218 psi). Mechanical preparations such as shot blasting, sandblasting, and/or diamond grinding—is required to remove surface laitance formed during finishing and curing.

It is highly recommended to create a sampling area before the start of the project. The test should be conducted on-site, using the method suggested by Premier Protective Coatings Group, to ensure proper adhesion and color. A sampling area should also be conducted on existing coatings to determine if there are contaminants or if delamination will occur.

- ✓ Dry - No wet areas (<4% moisture content).
- ✓ Clean - Remove contaminants, dust, grease, delaminated coating, laitance, or any other substances that may reduce or prevent proper adhesion.
- ✓ Profiled - Mechanically profiled surface CSP2-4 (ICRI).
- ✓ Sanitized - Repair all cracks and chipped areas. Concrete preparation must be carried out by mechanical means such as shot blasting.

Cavities, cracks, and imperfections will be visible in the coating if the concrete is not properly repaired. Use **PPC Epoxy Crack Repair** to smooth out and fill any concrete voids, pinholes, or other imperfections on the surface. Once the material has hardened, correct any imperfections through diamond grinding.

Another option will be to use **PPC Hybrid Polyurethane Polyurea 421** as a grout coat to fill scratches, pinholes, or cracks over the concrete. Once the material is dry you can apply your next coating right on top of it (24 Hr recoat window)

Mixing

Using a mechanical mixer, first premix Base Membrane 921 WT Side-B material thoroughly to attain a uniform color. Pour Side-A into Side-B slowly while mixing. Mix for 3–4 minutes. Use care not to allow the entrapment of air into the mixture.

NOTE: Base Membrane 921 WT should NOT be mixed by hand.

NOTE: Base Membrane 921 WT may NOT be diluted under any circumstances. DO NOT ESTIMATE, proportions are premeasured.

Application: Apply two coats of PPC Base Membrane 921 WT at a rate of 2 gallons per 100 sq ft (0.82 L/m²), or 50 sq ft per gallon. Each coat should be applied to a clean, dry surface.

Do not begin application if the surface temperature is below 50°F (10°C). The substrate temperature must also be at least 5°F (3°C) above the dew point. Do not apply when the ambient or surface temperature is rising, or in direct sunlight.

PPC Base Membrane 921 WT cures quickly and should be mixed using a drill with a minimum speed of 500 rpm.

Application can be done using spray equipment, a squeegee, notched trowel, or a phenolic-core roller. When using a roller, take care to avoid trapping air bubbles. Apply the material evenly across the entire surface at 60 wet mils (1524 microns).

In most cases, one coat is sufficient. If a second coat is required, apply it no sooner than 1 hour and no later than 4 hours after mixing. If more than 4 hours have passed, the surface may need to be mechanically abraded before recoating.

For roofing applications, PPC Base Membrane 921 WT may be used with reinforcing fabric in a two-coat system.

FOR BEST RESULTS

- Always apply at decreasing temperatures. Concrete is porous and traps air. During rising temperatures (typically in the morning), air expands and can cause gas release in the coating. It is safer to apply coatings in the late afternoon, especially for outdoor applications.
- The optimal ambient temperature should be between 18°C and 28°C (65°F and 82°F) during application.
- Always protect materials from excessive heat and cold, and precondition to room temperature as necessary.
- Regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application rates are obtained.
- The proper application of this product is the sole responsibility of the end user. Job site visits by PPC representatives are only for the purpose of making recommendations, and do not assume any liability for supervision or quality control.
- Spray down **Premera T2 MCM** topcoat to provide superior resistance to harsh chemicals, abrasion, mold, mildew, moss, chlorides & salt spray, acid rain, UV damage, oxidation, animal & bird waste damage, gum, and graffiti.

LIMITATIONS

- Do not apply to wet weather or if rain is approaching in the area
- Coating should not become wet within four (4) hours after application
- Containers that have been opened must be used as soon as possible
- Do Not dilute under any circumstances

Applications over on-grade or below-grade slabs, split slabs with buried membranes, sandwich slab systems with insulation, slabs over unvented metal pans, suspended pools, swimming pool decks, or any areas where hydrostatic pressure exists or may develop are not recommended unless a specific primer is used. Should also not be applied over magnesite, gypsum-based lightweight concrete, or in areas subject to traffic from chained or studded tires.

Concrete substrates must have a minimum compressive strength of 3,000 psi. A surface profile of at least ICRI CSP 2–3 is required prior to coating application.

Newly placed concrete must cure for a minimum of 28 days unless otherwise approved in writing by PPC. Surfaces must be properly trowel-finished in accordance with American Concrete Institute guidelines (hand troweling not required), followed by a light broom finish. The surface must be clean, sound, and free of loose material, ridges, voids, projections,

or debris that could negatively impact coating performance. Light broom-finished surfaces should be power washed prior to application. Proper surface preparation is critical (refer to General and Safety Guidelines). Concrete preparation may be achieved through shot blasting or by using **Premera FP1 Fusion Primer**.

WARNING: this product contains isocyanates, asphalt and solvent.

LIMITED WARRANTY

PPC warrants its products to be free of manufacturing defects and that they will meet PPC current published physical properties. PPC warrants that its products, when properly installed by a state licensed contractor according to PPC guide specifications and product data sheets over a sound, properly prepared substrate, will not fail for a period of 12 months. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by PPC of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. PPC shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. PPC shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. PPC reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and PPC makes no claim that these tests or any other tests, accurately represent all environments. For further information please contact us at the following email address: orders@premierprotectivecoatings.com or visiting www.premierprotectivecoatings.com

DISPOSAL

Any surplus material, including both Part A and Part B components, should be combined and allowed to cure. Upon curing, the product can be disposed of without any restrictive conditions. Uncured materials should be securely stored in an appropriate sealed container and disposed of in strict adherence to the applicable provincial, state, municipal, and federal regulations.

CAUTION

ALWAYS KEEP OUT OF THE REACH OF CHILDREN
KEEP FROM FREEZING CONDITIONS
INTENDED FOR INDUSTRIAL USE ONLY