OS POLYURETHANE MEMBRANE

PRODUCT TECHNICAL DATA SHEET

PPC – OS POLYURETHANE MEMBRANE is a seamless and monolithic traffic-grade waterproofing solution. This high-performance system features a dual-component, solvent-free* polyurethane membrane characterized by its minimal odor and accelerated setting properties. Engineered for durability, it is designed for heavy-duty wear surfaces on properly conditioned interior or exterior concrete, metal, plywood, or as an underlayment for asphalt. Thanks to its rapid gelation, the system remains functional in temperatures dipping to **20°F (-6.67°C)**. It offers high-build efficiency, allowing for a single-pass application of up to **200 mils**. Furthermore, its resilience against environmental humidity and thermal fluctuations ensures consistent installation across diverse climates. The product is supplied in both pre-textured and smooth finishes.

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WHERE TO USE

- Vehicular Asphalt and Concrete Parking Decks
- Stadiums
- Exterior and Interior Waterproofing Traffic Areas
- Walkways, Patio's and Stairways
- Under Pavers and Tile
- Plaza Deck Waterproofing System
- Mechanical Rooms
- Heavy Elastomeric Duty Flooring
- Basketball Courts
- Under Asphalt Overlay
- Pool Decks

ADVANTAGES

- Fast curing
- Excellent Weathering
- Seamless
- Labor Saving
- May be applied at any thickness in one pass
- Meets the Criteria of AS C-836 & E-96
- Non-Gassing
- User Friendly
- Fast Curing
- Resists Dirt Attraction
- Good Thermal Stability
- Highly Flexible over extreme temperatures
- No Odor
- Recoatable
- Meets All VOC Requirements
- Excellent Low Temperature Flexibility

COVERAGE RATES

- Theoretical coverage for 1 mil thickness is one gallon per 1520 sq. ft.
- When utilized as a primary waterproofing system, the minimum threshold is 35 mils.
- For exposed concrete surfaces and 45 mils when used as a base for asphalt overlays

For applications involving asphalt or pavers, it is mandatory to perform a sand broadcast using 16-20 mesh aggregate until 90% refusal is achieved. To ensure structural continuity, reinforce all fissures and expansion joints with fabric. A key benefit of this system is that it eliminates the necessity for a protection board when installed beneath pavers. However, sub-paver installations must maintain a minimum coating thickness of 90 mils, supplemented by targeted reinforcement at all joints and cracks.

PACKAGING & COLORS

PPC – OS POLYURETHANE MEMBRANE is available in:
5-gallon kit: One 5-gallon pail (net 4 gallons) of Part-A and one 1 gallon can of Part-B.
1 gallon kit: One 1 gallon can of Part-A and one quart can of Part-B.

Color: Medium Gray and Dark Gray. Custom colors are available upon request with minimum order quantity

MIXING

IMPORTANT: Under no circumstances should **PPC – OS POLYURETHANE MEMBRANE** be thinned or diluted. All components are factory-premeasured; do not attempt to estimate mixing ratios.

Begin by using a power mixer to individually agitate Part-A and Part-B until a consistent color is achieved, ensuring all settled solids are recovered from the base and walls of the pails. Gradually introduce Part-B into Part-A while maintaining continuous mixing, making sure to scrape the container's interior. Blend for 60 to 120 seconds, then "box" the materials (pour back and forth between containers) to ensure total homogenization. Continue mixing the combined solution until the pigment is perfectly uniform.

*For pitch adjustment, slopes of up to 1/4" are achievable by incorporating clean, kiln-dried silica sand into the mixture at a 1:1 ratio.

SHELF LIFE AND STORAGE

12 months from the date of manufacture in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards. store in unopened containers between 60 – 95° F (15 – 35° C).

PHYSICAL/CHEMICAL CHARACTERISTICS

Peel in Adhesion AS D-4541	327/36.7MPa
Split Tear, AS D-470	100 ± 10 pli
Elongation, AS D-412	800 ± 100 %
Tensile Strength, AS D-412	2500 ± 100psi
Tear, AS D-624	300 ± 25 pli
Hardness, AS D-2240	90 ± 3 A
Volatile Organic Compounds, AS D-2369-81	0.49 lb/gal
Pot Life (min @ 75°F, 50% RH)	9 minutes
Tack Free Time	3-4 hours
Solids by Volume	95%

OVERVIEW OF INSTALLATION STEPS

Mandatory Site Mockup
Prior to the commencement of the full installation, a control sample area of 100 to 200 sq. ft. must be executed. This benchmark panel serves as a standard for quality assurance and should be completed several days or weeks in advance of the primary application. This mockup requires formal validation from an authorized Property Management representative to confirm acceptable slip resistance, aesthetic finish, and overall performance.

The standard color provided is Grey; however, bespoke colors can be formulated upon request. Please note that custom tones are subject to minimum order volumes and potential surcharges.

Installation Guidelines
Inspect the substrate thoroughly for any micro-porosity or pinholes. If present, utilize **PPC – OS POLYURETHANE MEMBRANE** as an accelerated primer by maintaining the standard 4:1 mix ratio. Typically, the secondary application can proceed within 60 to 90 minutes. Note that the system components are factory-supplied in kits featuring a 4:1 Base-to-Catalyst proportion.
For the Topcoat, apply at a rate of 30 sq. ft. per gallon using a 50-mil notched squeegee.

- Blending: Combine the 1-gallon Side B into the 5-gallon pail of Side A (which contains 4 gallons of material). Agitate for 2 to 3 minutes, ensuring a vertical "bottom-to-top" mixing motion until the pigment is completely homogeneous and streak-free.
- Distribution: Discharge the mixture in a continuous ribbon along the shorter axis of the deck, leveling it with a notched squeegee. If a roller application is chosen, pour the material onto the surface first; the "dip and roll" technique is discouraged as the product may gel prematurely in the bucket.
- Staging: Utilize a grid system to verify that the correct volume of material is distributed within each designated section.
- Working Time: The pot-life is approximately 20 to 45 minutes. Aggregate should be broadcast either immediately or toward the end of this window.
- Base Coat Rate: Apply at 40 to 50 sq. ft. per gallon.
- Sub-Paver Specs: For installations under pavers, apply at a concentrated rate of 17 sq. ft. per gallon in a single pass.

No grinding or surface profile is needed when **Premera FP1 Fusion Primer** is used

Aggregate Integration
Permit the **PPC – OS POLYURETHANE MEMBRANE** to cure until it reaches a "thumbprint" tack. At this stage, broadcast a blend of 16-30 silica sand and 10% 16-mesh aluminum oxide into the base coat. Achieve a minimum density of 85% coverage in parking stalls and 85% or greater in high-traffic drive lanes. For enhanced traction in drive aisles and turn radii, incorporate a 20% broadcast of 40-mesh aluminum oxide.

The timing for the aggregate broadcast is typically between 12 to 15 minutes, or once the membrane is sufficiently stable to prevent the sand from sinking to the substrate (refusal). Within 2 to 4 hours, remove all loose granules or excess sand by sweeping. Proceed with the secondary application of **PPC – OS POLYURETHANE MEMBRANE** uniformly across the deck as specified.

Clean up
The membrane generally develops a surface skin within 15 to 45 minutes, reaching a full-depth cure over 3 to 7 days. These timelines are contingent upon environmental variables: lower temperatures and humidity will extend the curing window, while elevated temperatures will accelerate the process.
To prevent material hardening, all application tools and equipment must be cleaned immediately following use. Utilize an environmentally compliant solvent that adheres to local jurisdictional regulations.

Limitations
Maintain factory seals until the point of application. Any deviation from the specified mixing ratios will compromise the material's physical properties and may result in a failure to cure. This formulation incorporates isocyanates and specialized curative agents.

It is mandatory that the membrane reaches a state of complete vitrification (full cure) prior to the installation of hot-mix asphalt paving.

CAUTION! Roof surfaces may become slippery when wet.

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