

PPC WC Membrane GC

PRODUCT TECHNICAL DATA SHEET

PPC WC Membrane GC A seamless, joint-free, and crack-resistant waterproofing system made from a single-component, high-solids, water-curable, liquid-applied, bitumen-modified, coal tar-free urethane polyurea membrane. It is designed for use on both vertical and horizontal surfaces. The product can be applied as a single component or water-cured on green concrete as soon as 24 hours after placement. The system is fully adhered and reinforced and can be installed in a single application at thicknesses ranging from 30 to 2,500 mils (762–63,500 microns) or greater, while providing consistent curing throughout the coating. Use the appropriate product grade to ensure compliance with all applicable VOC regulations at the federal, state, county, and local levels at the installation site.

WHERE TO USE

- Under Malls, Plazas and Promenade Decks
- Balcony and Breezeway Waterproofing
- Tunnels
- Basements
- Roofing
- Between Slabs
- Planters
- Foundation Walls
- Osmosis Barrier Applications
- Green Roof Waterproofing
- Showers, Laundry, Kitchen Floors
- Plywood Waterproofing

ADVANTAGES

- Applied at any required thickness
- User friendly
- Change of slope of drain from Negative to Positive
- Resistant to Bacterial Growth
- Economical
- Non-Gassing
- Fast Curing
- No heating or kettles
- Fast recoat times
- Meets the criteria of ASTM C-836 & E-96
- Fill Ponds and low areas in one application
- Low odor
- Highly flexible over extreme temperatures
- Labor saving

PACKAGING & COLORS

Black

5 gallon (18.9 liter) pail

55 gallon drum, net fill 50 gallons (189 liters)

MIX RATIO

PPC WC Membrane GC should be thoroughly mixed using a mechanical mixer at slow speed to ensure a homogeneous material. Mix PPC WC Membrane GC with water (water must be added) at a ratio of one to two quarts of water (0.950 to 1.90 liters) to five gallons of PPC WC Membrane GC. Take care not to allow entrapment of air into the material. Do not mix in an up and down motion.

COVERAGE

Recommended application thickness is a minimum dry film build of **90 mils (2286 microns)** over plywood substrates and **60 mils (1524 microns)** over concrete. For extended warranty systems, a fully reinforced application of **120–160 mils (3048–4064 microns)** is required (refer to PPC WC Membrane GC System Specifications).

Stated coverage rates are based on ideal conditions and are not guaranteed. Extended warranty systems require a minimum total thickness of **120 mils (0.31 cm)** or greater.

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

Tear Resistance Die C, ASTM D624	50 ± 5 pli (8.76 ± 0.8 kNm)
Specific Gravity	1.12 ± 0.1
Solids by Weight ASTM D2369	95 ± 2%
Solids by Volume ASTM D2697	94 ± 2%
Hardness, Shore A ASTM D2240	25 ± 5
Tensile Strength, ASTM D412	300 ± 50 psi (2.07 ± 0.34 MPa)
Ultimate Elongation, ASTM D412	650% ± 50
Volatile Organic Compounds, ASTM D2369-81	<0.5 lbs/gal (<60 gm/liter)

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, equal to or greater than an ICRI CSP #3. Surface preparation may be performed 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 proposed system and obtain approval for coverage rates and overall performance prior to proceeding.

Priming

Prime the surface as required using **PPC Water Based Epoxy** as a primer (a mixture of Side A and Side B), at a coverage rate of 7 mils 229 ft²/gal & 10 mils 160 ft²/gal. Apply with a brush or a phenolic core roller to achieve approximately 3 dry mils (76 microns) of coating.

Existing urethane-coated surfaces must be primed with **Premera Fusion Primer FP1**. Rough or pinholed concrete substrates may require additional primer; these conditions are typically identified during the mock-up process. Refer to the Technical Notes section of the PPC website for further guidance. Do not allow the primer to puddle. Use a dry nap roller to remove excess material from puddles and overlaps.

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: Before application, PPC WC Membrane GC should be thoroughly mixed using a mechanical mixer at slow speed to ensure homogeneous material. Mix PPC WC Membrane GC with water (water must be added) at a ratio of one to two quarts of water (0.950 to 1.90 liters) to five gallons of PPC WC Membrane GC. Take care not to allow entrapment of air into the material. Do not mix in an up and down motion.

Application: Apply using a brush, squeegee, or trowel. An airless sprayer or phenolic-core roller may also be used; however, take care to avoid introducing air bubbles. Apply PPC WC Membrane GC evenly over the prepared surface. At 75°F (24°C) and 50% relative humidity, allow the coating to cure for a minimum of 2–4 hours before applying additional coats. Cure times may vary based on temperature and humidity conditions. A 30 mil (762 micron) construction coat may be applied on horizontal surfaces for temporary waterproofing until the final system is installed. Additional material may be required to achieve a smooth finish due to potential surface damage. Proper slope to drain is essential for effective waterproofing. Primer is optional when applied to plywood and CMU surfaces.

Curing:

For multi-coat applications, allow the coating to cure for a minimum of 2 hours and no more than 48 hours before applying additional layers. Cure time is dependent on ambient temperature and humidity conditions. If the recoat window exceeds 48 hours, the surface must be re-primed prior to further application. Note that overall curing times will vary based on environmental conditions.

FOR BEST RESULTS

- Recommended coverage rates are a minimum dry film thickness of 90 mils (2286 microns) on plywood and 60 mils (1524 microns) on concrete.
- Coverage rates and cure times may vary based on temperature, relative humidity, surface roughness and porosity, aggregate selection and embedment, and application method.
- Allow 2–48 hours between coats before applying the next layer
- Cure time depends on temperature and humidity
- If more than 48 hours pass, the surface must be re-primed

LIMITATIONS

- Substrates must be clean, dry, and free of dust, debris, or contaminants.
- Product is not UV stable.
- Not designed to resist direct traffic, wear, or abrasion.
- Once opened, containers should be used promptly.
- Do not thin or dilute under any circumstances.

The following conditions are not suitable for application of PPC deck coating systems or products:

1. Do not apply in areas where hydrostatic pressure exists or may develop unless specific primer is used. Application over asphalt or asphalt overlays is not permitted without prior written approval from PPC.
2. Concrete substrates must have a minimum compressive strength of 3,000 psi. A surface profile of ICRI CSP 2–3 or greater is required prior to coating.

3. New concrete must be cured for a minimum of 24 hours unless otherwise authorized in writing by PPC. Surfaces must be properly finished in accordance with American Concrete Institute guidelines (hand troweling not required), followed by a light broom finish. The substrate must be free of loose material, ridges, voids, projections, or debris that could interfere with coating performance. Light broom-finished concrete should be power washed prior to application.
4. Proper cleaning is required (refer to General and Safety Guidelines). Surface preparation can be achieved by shot blasting or by using **Premera Fusion primer FP1**. Adhesion and peel testing is strongly recommended prior to application.

WARNING: This product contains isocyanates and solvents.

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