



Architectural Coatings

PERMA-CRETE® MATTE-FLEX® Elastomeric Coating

GENERAL DESCRIPTION

PERMA-CRETE® MATTE-FLEX® Elastomeric Coatings are specifically designed for above ground, masonry substrates requiring long lasting superior elongation properties. This elastomeric bridges cracks and masks surface imperfections. This product is alkali and efflorescence resistant. The 100% acrylic high build formula repels water (passes TT-C-555B, Section 3.3.3 and ASTM D6904-3 for wind-driven rain) yet allows moisture vapor to pass easily out of the surface. PERMA-CRETE Elastomeric Coatings are ideal for use on a variety of exterior masonry projects including high-rise apartments and condominiums, warehouses, hospitals, schools, hotels, and commercial and residential structures.

RECOMMENDED SUBSTRATES

Brick	Fiber Cement Siding	Tilt Up
Concrete	Masonry	
Concrete/Masonry Block	Stucco	

CONFORMANCE STANDARDS

VOC compliant in all regulated areas

APPLICATION INFORMATION

Stir or shake thoroughly before applications. Read all label and Material Safety Data Sheet (MSDS) information prior to use. MSDS are available through our web site or by calling 1-800-441-9695.

Application Equipment: Apply by airless spray, roller or brush. Apply by brush to small areas only. If spray applied, product must be back-rolled. When applying by roller, the final passes should be completed in a downward direction to ensure a uniform appearance. Maintain a wet edge for sheen uniformity.

Airless Spray: Minimum requirements: Pressure 2000 – 2800 psi, tip 0.019” - 0.027”, flow rate 1.5 gal/minute. Spray equipment must be handled with due care and in accordance with manufacturer’s recommendations. High pressure injection of coatings into the skin by airless equipment may cause serious injury.

- Brush:** Polyester/Nylon Brush
- Roller:** 3/4” - 1” nap synthetic roller cover
- Thinning:** Not recommended

APPLICATION INFORMATION (continued)

Permissible temperatures during application:

- Material:** 35 to 100°F 2 to 38°C
- Ambient:** 35 to 100°F 2 to 38°C
- Substrate:** 35 to 100°F 2 to 38°C

See Limitations of Use for optimum elastomeric properties

PRODUCT DATA

- PRODUCT TYPE:** 100% Acrylic
- BASE/COLOR:** 4-310 White - Smooth/Lower Sheen
- SHEEN:** Flat 1 to 4 (85° Gloss Meter)
- CLEANUP:** Soap and Water
- VOLUME SOLIDS:** 36% +/- 2%
- WEIGHT SOLIDS:** 50% +/- 2%
- VISCOSITY:** 120 to 130 KU
- VOC:** 95 g/L (.79 lbs./gal.)

- COVERAGE:** 100 to 135 sq. ft./gal. (9 to 12.5 sq. m/3.78L)
- Wet Film Thickness: 12 mils to 16 mils
- Wet Microns: 302 to 407
- Dry Film Thickness: 4.3 mils to 5.8 mils
- Dry Microns: 109 to 146

Coverage figures do not include loss due to surface irregularities and porosity or material loss due to application method or mixing.

Note: To achieve wind driven rain resistance and maximum elongation, the product must be applied as a 3 coat system (4-100, 4-2 and, 4-310).

- WEIGHT/GALLON:** 10.7 lbs. (4.9 kg) +/- 0.2 lbs. (91 g)

- DRYING TIME:** Dry time @ 70°F (21°C); 50% relative humidity
 - To Touch: 2.5 hours
 - To Handle: 4 hours
 - To Recoat: 8 hours minimum
- Drying times listed may vary depending on temperature, humidity, color, film build, and air movement.

- FLASH POINT:** Over 200°F (93°C)

FEATURES AND BENEFITS

Features

- Elongation
- Resists Wind Driven Rain
- Water Vapor Permeance
- High Build
- Two (2) Coat System
- Tensile Strength
- Excellent Application Properties
- Mildew Resistant Coating
- UV Resistance

Benefits

- Bridges cracks and masks surface imperfections
- Water repellency requires 3 coat pinhole free coating system @ standard coverage rate: 4-100, 4-2, and 4-310
- Breathability
- Provides extra protection in fewer coats (2 coat)
- Turns jobs faster
- Film integrity is maintained when expansion and contraction occurs
- Less time for application
- Mildew and fungal growth resistance on paint film
- Looks like new longer

PERFORMANCE DATA

Property	Test Method	Results
Resistance to Wind Driven Rain	ASTM D6904-3	Passes 1 pinhole free coat each of 4-100, 4-2, 4-310
Elongation	ASTM D2370	388% 2 coats
Tensile Strength	ASTM D2370	406 psi 2 coats
Water Vapor Permeance	ASTM D1653	10 perms dry cup
Flexibility	ASTM D522B	Pass
Mildew Resistance	ASTM D3273/74 and D5590	No growth

GENERAL SURFACE PREPARATION

Surfaces to be coated must be dry, clean, sound, and free from all contamination including loose and peeling paint, dirt, grease, oil, wax, concrete curing agents and bond breakers, chalk, efflorescence, mildew, rust, product fines, and dust. Remove loose paint, chalk, and efflorescence by wire brushing, scraping, sanding, and/or pressure washing. Putty all nail holes and caulk all cracks and open seams. Sand all glossy, rough, and patched surfaces. Feather back all rough edges to sound surface by sanding. Prime all bare and porous substrates with an appropriate primer.

Clean surfaces per ASTM Standard Practice D4258-83: Standard Practice for Surface Cleaning Concrete for Coating. Vacuum cleaning, water cleaning, detergent water wash, power wash cleaning, steam cleaning, hand tool and mechanical cleaning are acceptable cleaning methods. Remove efflorescence by pressure washing or cleaning with dilute muriatic acid (following manufacturer's instruction) or a solution of 1 part white vinegar to 4 parts water. Rinse thoroughly and allow to dry.

Remove mildew by using PPG MILDEW CHECK® Multi-Purpose Wash, 18-1; or 1 part chlorine bleach to 3 parts water. Before use, be sure to read and follow instructions and warnings on label.

Dry substrate thoroughly to a moisture content under 12%. Clean chalky paint in good condition by sweep blasting, power washing, wire brushing, etc. to remove loose material. After cleaning, powdery, chalky, or unpainted recommended substrates may be conditioned with a coat of PERMA-CRETE Exterior Acrylic Clear Masonry Surface Sealer 4-808, Pigmented Masonry Surface Sealer 4-809, or Pigmented Bonding Coat 4-898.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust or fumes. LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a properly fitted NIOSH-approved respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead. In Canada contact a regional Health Canada office. Follow these instructions to control exposure other hazardous substances that may be released during surface preparation.

BRICK: New brick and mortar should cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before priming. Use of an alkali resistant primer is recommended. Painting glazed brick is not recommended due to potential adhesion problems.

CONCRETE and MASONRY: New concrete should cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before priming. Use of an alkali resistant primer is recommended.

CONCRETE/MASONRY BLOCK: Mortar should cure for at least 30 days and preferably 90 days prior to priming. Fill block with an appropriate block filler if a smoother uniform surface is desired. Use of an alkali resistant primer is recommended after application of block filler. Surfaces previously coated with water thinned cement-based paint must be prepared with extra care. If the material appears to be adhering tightly, a masonry sealer may be applied to seal the surface. Check adhesion by applying a piece of masking tape. If the sealer peels off and has loose particles, remove all chalking or crumbling material, re-seal and re-check adhesion.

FIBER CEMENT SIDING: Fiber cement board may present potential adhesion, alkali burn, and efflorescence problems. New board should be aged for at least 30 days prior to priming and painting. The pH of the substrate must be less than 10 and the moisture content must be less than 12% prior to priming and topcoating. All cracks and opens seams should be caulked to prevent water penetration. Pre-primed board from the manufacturer may not be uniformly or completely sealed. It is recommended that an alkali resistant primer be applied to ensure complete and uniform sealing prior to topcoating.

STUCCO: New stucco should cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before priming. Use of an alkali resistant primer is recommended. Surface chalk from the curing or aging process should be removed then sealed with an appropriate sealer to rebind and restore the surface to a sound condition.

TILT-UP or PRE-CAST CONCRETE: New tilt-up or pre-cast should cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before priming. Moisture content should be less than 12% prior to priming and topcoating. All bond breakers, release agents, and admix plasticizers must be removed to prevent adhesion problems. Bond breakers and similar surface contaminants should be removed as directed by the tilt-up manufacturer which can include specific cleaners, powerwashing, and/or surface profiling by mechanical methods. Surface chalk from the curing or aging process should be removed then sealed with an appropriate sealer to rebind and restore the surface to a sound condition. Additional surface preparation guidelines can be found by referring to Technical Bulletin AF-2008-8 Guide on Painting Tilt-Up Concrete. Information or a copy of the bulletin can be obtained by calling 1-800-441-9695.

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TINTING AND BASE INFORMATION

Refer to the appropriate color formula book, automatic tinting equipment, and/or computer color matching system for color formula and tinting instructions.

4-310 White and Mixing Base - Smooth / Lower Sheen

LIMITATIONS OF USE

Apply when air, surface and product temperatures are above 50°F (10°C) and surface temperature is at least 5°F (3°C) above the dew point. This product will form a film at 35°F (2°C). However, to achieve optimum elastomeric/elongation properties, apply at or above 50°F (10°C). At temperatures above 100°F (38°C), application will be affected. Avoid exterior application late in the day when dew and condensation are likely to form or if rain or snow is expected. Not recommended for use on surfaces demonstrating hydrostatic or high vapor pressure or for immersion service. Do not use on floors.

PROTECT FROM FREEZING.

USE WITH ADEQUATE VENTILATION. KEEP OUT OF REACH OF CHILDREN.

While this product provides a mildew resistant coating, growth may still occur if the substrate is not properly prepared prior to painting and/or if the substrate is consistently exposed to conditions conducive to mold, mildew, and algae. Examples of these conditions include, but are not limited to, under eaves, behind shrubbery and trees, and in areas that are consistently damp with little to no direct sunlight.

RECOMMENDED PRIMERS

Brick	4-808, 4-809, 4-898, 4-2, 4-503, 4-603, 17-921
Concrete	4-808, 4-809, 4-898, 4-2, 4-503, 4-603, 17-921
Concrete/Masonry Block	4-100, 4-2, 4-503, 4-603, 17-921
Fiber Cement	4-503, 4-603, 4-2, 17-921
Masonry	4-808, 4-809, 4-898, 4-2, 4-503, 4-603, 17-921
Stucco	4-808, 4-809, 4-898, 4-2, 4-503, 4-603, 17-921
Tilt-Up	4-808, 4-809, 4-898, 4-603

PACKAGING

5-Gallon (18.9L)

PPG Architectural Finishes, Inc. believes the technical data presented is currently accurate; however, no guarantee of accuracy, comprehensiveness, or performance is given or implied. Improvements in coatings technology may cause future technical data to vary from what is in this bulletin. For complete, up-to-date technical information, visit our web site or call 1-800-441-9695.



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