PERMA-CRETE

4-22XIC Series

PPG Architectural Coatings

GENERAL DESCRIPTION

Perma-Crete 100% Acrylic High Build is specifically designed for interior and exterior, above grade, concrete and masonry substrates requiring high performance protection. It is alkali, moisture and efflorescence resistant. Perma-Crete 100% Acrylic High Build provides resistance against water, UV light, staining and is permeable. It passes ASTM D6904-3 for wind driven rain. Perma-Crete 100% Acrylic High Build provides a highly durable and tough exterior waterproof coating. This Perma-Crete high build topcoat is ideal for tilt-wall, CMU, stucco, and fiber cement structures.

RECOMMENDED SUBSTRATES

Brick Concrete

Concrete Block (CMU) Fibre Cement Siding

Masonry Stucco

Tilt-Up Concrete

See details in the "recommended primers" section.

CONFORMANCE STANDARDS

 Complies with the Canadian Volatile Organic Compound Concentration Limits for Architectural Coatings Regulations.

TINTING AND BASE INFORMATION

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

4-22XIC White

4-40XIC Ultra Deep Base*

*Must be tinted before use.

Some colours, drastic colour changes, or porous substrates may require more than one coat to achieve a uniform finish.

PACKAGING

3.78 L & 18.9 L. Not all products are available in all sizes.

PRODUCT DATA

PRODUCT TYPE: 100% Acrylic Latex

 SHEEN:
 Flat

 VOLUME SOLIDS*:
 45% ± 2%

 WEIGHT SOLIDS*:
 61% ± 2%

 VOC*:
 < 100 g/L</td>

 DENSITY*:
 1.4 kg/L

*Product data calculated on product 4-22XIC.

SPREADING RATE PER COAT: Approximately 11.5 to 21 square metres (125 to 225 sq. ft.) per 3.78 litres on primed, smooth, nonporous surfaces.

100% Acrylic High Build Interior / Exterior Masonry, Flat Coating

Wet Film Thickness: 178 to 330 microns

7 to 13 mils **Dry Film Thickness:**81 to 147 microns

3.2 to 5.8 mils

Coverage figures do not include loss due to surface irregularities and

porosity or material losses due to application method or mixing. **DRYING:** Dry time @ 25°C (77°F); 50% relative humidity.

To Touch: 1 hour To Recoat: 4 hours

To Recoat at 2°C (35°F) Minimum 24 hours

Full curing: 30 days

Drying times listed may vary depending on temperature, humidity, film build, colour, and air movement.

Permissible temperatures during the application:

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

CLEANUP: Remove as much product quantity as possible and clean

tools with lukewarm soapy water immediately after use.

DISPOSAL: Consult your municipality in order to dispose of paint residues according to environmental regulations. Do not pour down a drain or storm sewer.

FLASH POINT: Over 93 °C (200 °F)

FEATURES / BENEFITS

Features Benefits

Exceptional dirt resistance Stays clean to extend the coatings life cycle.

Excellent flexibility and durability Resists cracking and peeling from thermal movement of the substrate.

Resists Wind Driven Rain Water resistance requires 2 coats of a pinhole free film.

High Build Provides more protection in fewer coats than conventional paints.

Tensile Strength Film elongation and recovery intergrity is maintained with thermal expansion and contraction.

Mildew resistant coating Mildew anf fungal growth resistance on the paint film.

UV Resistance Withstands the harshest conditions.

Alkali Resistance Can apply to fresh concrete at 7 days and a pH less than 13.

Application down to 2°C Extends painting season.

PERFORMANCE DATA

Property Test Method Results
Resistance to Wind Driven Rain ASTM D6904-03 Passes: pinhole free film, one coat each; 4-603XI Perma-Crete Primer @

2 mils DFT and 4-22XIC *Perma-Crete* High Build @ 5 mils DFT Passes: pinhole free film, two coats; 4-22XIC *Perma-Crete* High Build

@ 5 mils DFT per coat

Passes: pinhole free film, one coat each; 4-603XI Perma-Crete Primer @ 2 mils DFT, 4-50C Perma-Crete Texture @ 9 mils DFT, and 4-22XIC Perma-

Crete High Build @ 5 mils DFT

Passes: pinhole free film, one coat each; 4-50C Perma-Crete Texture @

9 mils DFT and 4-22XIC Perma-Crete High Build @ 5 mils DFT

Elongation ASTM D2370 240% @ 11 mils DFT

Tensile Strength ASTM D2370 725 psi
Flexibility ASTM D522, Method B Passes
Mildew Resistance ASTM D5590 No growth

Water Vapor Permeance ASTM D1653 32 perms @ 5 mils DFT

Before use, be sure to read and follow the instructions and warnings on the label and Safety Data Sheet. See other cautions on the last page.

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100% Acrylic High Build Interior / Exterior Masonry, Flat

LIMITATIONS OF USE

PROTECT FROM FREEZING. USE WITH ADEQUATE VENTILATION. KEEP OUT OF REACH OF CHILDREN.

Apply only when air and surface temperatures are above 2°C and at least 3°C above the dew point. Air and surface temperatures must remain above 2°C for the next 24 hours. For optimum application properties, bring material to at least 10°C prior to application. Surface pH limitation is 7 - 13. Avoid exterior applications late in the day when dew and condensation are likely to form or if rain or snow is expected. Always back roll the surface when applied by spray to achieve a pinhole free film.

Do not use on floors, on surfaces demonstrating hydrostatic or high vapour pressure, or for immersion service.

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 mould, mildew, and algae.

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.

Solve all moisture problems.

Blistering and peeling issues are commonly caused by moisture behind the paint film.

Putty all nail holes and caulk all cracks or open seams.

Sand all glossy, rough or patched surfaces.

Feather back all rough edges to sound surface by sanding.

When applied to an uncoated substrate, two coats are required, with the first coat acting as the primer.

After cleaning, chalky and porous masonry surfaces may be primed with Perma-Crete Acrylic Masonry Surface Sealer 4-809C.

PRECAUTION: Dry sanding will give rise to dust and/or hazardous fumes. Wear suitable respiratory protective equipment. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to hazardous substances that may be released during surface preparation. WARNING! If you scrape, sand, or remove old paint, you may release lead dust. 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. Contact a regional Health Canada office for more information.

Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

BRICK: Prior to painting, mortar should cure for at least 7 days and preferably 30 days. The pH of the substrate must be less than 13. Painting glazed brick is not recommended due to potential adhesion problems.

CONCRETE & MASONRY BLOCK: Prior to painting, concrete or mortar should cure for at least 7 days and preferably 30 days. The pH of the substrate must be less than 13. 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, reseal and recheck adhesion.

FIBRE CEMENT SIDING: Fibre cement board may present potential adhesion, alkali burn, and efflorescence problems. Prior to priming or top coating, fibre cement should cure for at least 7 days and preferably 30 days. The pH of the substrate must be less than 13 and the moisture content must be less than 12% prior to priming and topcoating. Caulk all holes, cracks and open seams 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: Prior to painting, stucco should cure for at least 7 days and preferably 30 days. The pH of the substrate must be less than 13. 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 PRECAST CONCRETE: New tilt-up or precast should cure for at least 30 days and preferably 90 days prior to priming and topcoating. The pH must be less than 13 before priming with an alkali resistant primer or topcoating. Moisture content must 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, power washing, 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. Contact your local representative for a copy of this bulletin.

Before use, be sure to read and follow the instructions and warnings on the label.

Contact your local representative for any additional surface preparation guidelines.

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RECOMMENDED PRIMERS

Product is self-priming in most applications, but other primers that can be used are:

Brick 4-100XIC, 4-809C, 17-921XIC, *Dulux Gripper 60000A*

Concrete Block (CMU) 4-100XIC, 17-921XIC, Dulux X-pert 36250

Concrete and Masonry 4-100XIC, 4-809C, 17-921XIC, Dulux X-pert 36250

Fibre Cement Siding 17-921XIC, Dulux Gripper 60000A

Stucco 4-100XIC. 4-809C. 17-921XIC. Dulux Weatherquard 1535. Dulux Gripper 60000A

Tilt-Up or Precast Concrete 17-921XIC, Dulux Weatherguard 1535, Dulux Gripper 60000A,

APPLICATION INFORMATION

KEEP OUT OF REACH OF CHILDREN. USE WITH ADEQUATE VENTILATION. Read all label and Safety Data Sheet (SDS) information prior to use. SDS are available from your retailer, through our website or by calling 1-800-463-7426.

Stir thoroughly before use and occasionally during use. When using more than one container of the same colour, intermix to ensure colour uniformity.

Application Equipment: Apply with a high quality brush, roller, or by airless spray equipment. When using more than one container of the same colour, intermix to ensure colour uniformity. Apply one or two coats as required.

Two pinhole free coats at 127 microns (5 mils) each (254 microns [10 mils] total) DTF are required for wind-driven rain protection.

Brush: High quality polyester/nylon brush.

Roller: 10 to 20 mm (3/8 - 3/4 in.) nap synthetic roller cover.

Airless Spray: Pressure 1800–2400 psi, tip 0.017 in. - 0.021 in.; flow rate 3.8 L/minute.

Spray equipment must be handled with due care and in accordance with the manufacturer's recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury.

Thinning: Do not thin.

PRECAUTIONS

Keep out of the reach of children. Keep containers tightly closed and sealed until ready for use.

Before using the products listed in this publication, carefully read each product label and follow directions for its use. Use personal protective equipment as required. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation.

Note: These warnings encompass the product series.

MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. Avoid contact with skin and eyes.

Sanding and grinding dusts may be harmful if inhaled. Do not breathe vapour or mist. Do not swallow. Do not get on skin or clothing. Wash thoroughly after handling. Provide fresh air ventilation during and after application and drying. Prior to use, read and follow product-specific SDS and label information.

FIRST AID: If swallowed, rinse mouth with water (only if the person is conscious). Call a Poison Control Centre or doctor immediately. Do not induce vomiting unless directed to do so by medical personnel. If in eyes, rinse with water for 15 minutes. Check for and remove any contact lenses. If in eyes, rinse with water for 15 minutes. In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Get medical attention if irritation develops. If breathed in, move person to fresh air. If experiencing respiratory symptoms call a POISON CENTRE or doctor/physician.

For workplace use, an SDS are available from your retailer, through our website or by calling 1 800 463-7426.

EMERGENCY SPILL INFORMATION: 1 514 645-1320 or 1 800 463-7426.

LIMITED WARRANTY

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PPG Industries, Inc. Architectural Coatings One PPG Place Pittsburgh, PA 15272 www.ppgpaints.com

PPG Architectural Coatings Canada Inc. 1550 rue Ampère, Suite 500 Boucherville (Québec), J4B 7L4 Technical Services 450 442-2220

Fax: 1 866 660-2220 Fax: 450 679-8893 1 800 278-8893 Architect/Specifier 1-888-PPG-IDEA

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