



# PERMA-CRETE®

4-4210 - White/Pastel

4-4220 - Midtone

4-4240 - Ultra Deep

Architectural Coatings

Perma-Crete Color Seal™ WB Interior/Exterior Acrylic Concrete Stain

## GENERAL DESCRIPTION

Perma-Crete Color Seal™ WB Interior/Exterior Acrylic Concrete Stain 4-4210 series is a film forming, tintable, water borne, acrylic concrete stain ideal for use on interior/exterior, above-ground, vertical and horizontal surfaces. This fast drying stain is water and chemical resistant. Color Seal WB has excellent hot tire resistance while providing good adhesion. This low odor product seals the surface and improves the appearance of the substrate by adding color and durability. Perma-Crete Color Seal WB is ideal for use on concrete surfaces such as garage floors, driveways, pool decks, walkways, patios, porches, warehouse floors and more.

## RECOMMENDED SUBSTRATES

Brick	Exposed Aggregate
Concrete	Masonry
Concrete Block (CMU)	Non-Glazed Ceramic Tile
	Stone

## CONFORMANCE STANDARDS

VOC compliant - lower than Federal AIM, OTC, LADCO and CARB 2000 regulations

## APPLICATION INFORMATION

**Application Equipment:** Apply with a high quality brush, roller, or by spray equipment. 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.

**Airless Spray:** Minimum requirements: Pressure 1800 - 2400 psi, tip 0.013" - 0.017", flow rate 0.5 gal/minute.

**Conventional Spray:** DeVilbiss MBC-510 gun; E tip; 704 Air Cap; 3/8" ID material hose; double regulated pressure tank with oil and moisture separator; 20 psi fluid pressure; 40-60 psi air pressure. Spray equipment must be handled with due care and in accordance with manufacturer's recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury.

**Brush:** Nylon/Polyester Brushes

**Roller:** Use 1/2" to 3/4" nap synthetic roller cover

**Thinning:** Product may be thinned with up to 1/2 pint of clean water for the first coat to aid in priming and penetration. Thinning of additional coats is not recommended.

Note: Thoroughly saturate concrete with first coat. Apply 2 coats evenly and avoid puddles, heavy spots and laps to prevent color variation in applied film. Color differences will also occur due to different porosities of substrates.

## FEATURES AND BENEFITS

### Features

- Seals Concrete
- Hot Tire Resistance
- Fast Drying
- Moisture and Chemical Resistance
- Good Adhesion
- Excellent Application Properties
- UV Resistance
- Application to 35°F

### Benefits

- Minimizes moisture damage
- Minimizes staining and discoloration on traffic surface
- Turns jobs faster
- Extends substrate life
- Resistant to peeling and cracking
- Less time for application and resists pinholing
- Looks like new longer
- Longer painting season

## PERFORMANCE DATA

Property	Test Method	Results
Hot Tire	Koehler I.C.	Passes, no staining or adhesion loss
Water repellency	ASTM D4446	Passes, no water absorption
Weathering	ASTM D4587	Passes, QUV 500 Hours
Adhesion	ASTM D3359	Passes, Wet and Dry
Yellowing	ASTM E313	Passes, no discoloration

## 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

## PRODUCT DATA

<b>PRODUCT TYPE:</b>	Acrylic
<b>BASE/COLOR:</b>	4-4210 White & Pastel 4-4220 Midtone 4-4240 Ultra Deep
<b>SHEEN:</b>	Satin
<b>CLEANUP:</b>	Soap and Water
<b>VOLUME SOLIDS*:</b>	29% +/- 2%
<b>WEIGHT SOLIDS*:</b>	40% +/- 2%
<b>VISCOSITY*:</b>	75 to 85 KU
<b>VOC*:</b>	184 g/L (1.53 lbs./gal.)

\*Product data calculated on product 4-4210.

**COVERAGE:** Approximately 250-300 sq. ft./gal.(23.2 to 27.9 sq. m/3.78L) on smooth, nonporous substrate

Wet Film Thickness:	5.3 to 6.4 mils
Wet Microns:	136 to 163
Dry Film Thickness:	1.6 to 1.9 mils
Dry Microns:	39 to 47

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

**WEIGHT/GALLON\*:** 9.8 lbs. (4.4 kg) +/- 0.2 lbs. (91 g)

**DRYING TIME:** Dry time @ 70°F (21°C); 50% relative humidity

To Touch:	30 minutes
To Handle:	2 hours
To Recoat:	6 hours
For Pedestrian Service:	24 hours
For Vehicle Service:	72 hours

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

**FLASH POINT:** Over 200°F (93°C)

## 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.

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, vertical surfaces that are powdery, chalky, or unpainted 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](http://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 staining. The pH of the substrate must be less than 10. 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 staining. The pH of the substrate must be less than 10.

**CONCRETE/MASONRY BLOCK:** Mortar should cure for at least 30 days and preferably 90 days prior to priming and staining. Block filler should be applied prior to priming and staining if a smoother uniform surface is desired. 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 for vertical substrates 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.

Architectural Coatings

*Perma-Crete Color Seal™* WB Interior/Exterior Acrylic Concrete Stain**TINTING AND BASE INFORMATION**

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

4-4210	White & Pastel
4-4220	Midtone
4-4240	Ultra Deep

**LIMITATIONS OF USE**

Do not apply to horizontal concrete floors that do not have a vapor barrier underneath, or to other surfaces where moisture gets behind the stain.

Apply only when air and surface temperatures are above 35°F (2°C) and surface is at least 5°F (3°C) above the dew point. Air and surface temperatures must remain above 35°F (2°C) for the next 24 hours. Do not apply when air or surface temperature is below 35°F or above 100°F. For optimum application properties, bring material to 50-90°F. Surface pH limitation is 7-10.

Allow 24 hours prior to pedestrian service; 72 hours for vehicle traffic.

Not intended for wood. Avoid contact with strong acids and bases. Clean up gasoline spills immediately.

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**

Product is self-priming for vertical and horizontal applications. Refer to Surface Preparation Recommendations

**PACKAGING**

1-Gallon (3.78L)  
5-Gallon (18.9L)

PPG is a registered trademark of PPG Industries Ohio, Inc. *Perma-Crete* and PPG *MILDEW CHECK* are registered trademarks of PPG Architectural Finishes, Inc.

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.



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

Technical Services  
1-800-441-9695  
1-888-807-5123 fax

Architect/Specifier  
1-888-PPG-IDEA

PPG Canada, Inc.  
Architectural Coatings  
4 Kenview Blvd  
Brampton, ON L6T 5E4

B4.13 5/2012  
(Supersedes 2/2012)

Made in the  
**USA**