PRODUCT SELECTOR & SYSTEM GUIDE

PERMA-CRETE

PPG

MASONRY COATINGS PROGRAM





Concrete Protection, Durability and Beauty

A GUIDE TO CHOOSING THE RIGHT COATING SYSTEM FOR YOUR MASONRY NEEDS

AT PPG, WE UNDERSTAND THAT TIME CONSTRAINTS, BUDGET REQUIREMENTS

and tough substrate conditions can present complications on job sites. The *PERMA-CRETE*[®] Masonry Coatings line can help you overcome these obstacles with confidence. *PERMA-CRETE's* unrivalled performance characteristics equip the line to meet the demands of an unprecedented array of surface conditions to solve job site issues and prevent future problems.

Proper selection and use of coatings for concrete should lead to a successful and aesthetically attractive job. A wide variety of coatings are available for every kind of masonry substrate encountered in the construction market. This PPG *PERMA-CRETE* Product Selector & System Guide has been designed to provide a simple and easy way for you to find solutions to all of your concrete and masonry needs by categorizing the PPG *PERMA-CRETE* family of products into the following five groups:

FILLERS; SEALERS; PRIMERS ELASTOMERICS TEXTURED COATINGS TOPCOATS, VERTICAL ABOVE-GRADE TOPCOATS, HORIZONTAL CAPABLE

This Product Selector & System Guide focuses on some typical concrete and masonry end uses and specific product recommendations for common masonry surface problems and conditions for both commercial and residential applications. Use this Product Selector & System Guide to find the best coating for your concrete structure.



This logo signifies PPG paints which are considered green and can help earn LEED credits based on current guidelines.

PATCHING COMPOUNDS 4-1000 / 4-1001 / 4-1002 / 4-1003

PERMA-CRETE® Patching Compounds are waterborne acrylic patches designed to fill cracks and voids on masonry surfaces to prevent moisture intrusions. These patches can be topcoated with any PPG *PERMA-CRETE* acrylic latex primer or topcoat.



PERMA-CRETE® PITT-FLEX® ELASTOMERIC PATCHING COMPOUND

4-1000 / 4-1001 / 4-1002 / 4-1003

- A premium high-technology product formulated for patching larger cracks (1/16" to 1/4") on masonry surfaces
- Patches cracks, voids and openings in masonry and stucco surfaces
- Compatible with acrylic coatings
- Ideal for use on concrete, stucco and masonry
- Knife Grade Smooth & Textured
- Brush Grade Smooth & Textured
- Interior/Exterior
- Available in 1-gallon
- VOC compliant Lower than current Federal AIM Regulations

PRIMERS 4-100 / 4-603 / <u>4-2 / 4-503</u>

PPG PERMA-CRETE[®] offers a range of 100% acrylic primers ideal for tilt-up concrete, brick, concrete block, stucco and masonry substrates. Whether you're looking for a primer to reinforce the performance of your exterior acrylic paint, or a primer to stand up against wind-driven rain, you'll find a primer within the PPG PERMA-CRETE family of products to meet your needs.



PERMA-CRETE® LTC LOW TEMP. BLOCK SURFACE FILLER 4-100

- A premium lightweight, acrylic latex block filler and surfacer
- Smoothes, fills and levels surfaces
- Apply to surfaces at 7 days and/ or surface less than 13 pH
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco and tilt-up
- Can help earn LEED N.C. 2.2. credits
- Interior/Exterior
- Available in 1- and 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® INT./EXT. ALKALI RESISTANT PRIMER 4-603

- A premium alkali-resistant primer
- Provides excellent sealing and stain blocking performance
- Apply to surfaces at 7 days and/ or surface less than 13 pH
- Ideal for use on brick, concrete, concrete block (CMU), wood, cinder block, fiber cement siding, masonry surfaces, stucco, tilt-up and wallboard
- Can help earn LEED N.C. 2.2. credits
- Interior/Exterior
- Available in 1- and 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® HIGH BUILD 100% ACRYLIC PRIMER 4-2

- A high build primer
- Resists wind-driven rain as part of three-coat system (see systems guide for details)
- Apply to surfaces at 7 days and/ or surface less than 13 pH
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, masonry surfaces, stucco and tilt-up
- Can help earn LEED N.C. 2.2. credits
- Interior/Exterior
- Available in 1- and 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® EXTERIOR CONCRETE & STUCCO PRIMER 4-503

- An alkali-resistant primer
- Apply to surfaces at 7 days and/ or surface less than 13 pH
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco, tilt-up and wallboard
- Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

SEALERS 4-808 / 4-809 / 4-898 / 4-6100 / 4-6200

PPG PERMA-CRETE[®] offers a line of sealers with a wide range of performance characteristics and attributes. From acrylic to silane siloxanes, from penetrating to film-forming, *PERMA-CRETE* sealers can seal chalky or porous substrates, repel water, prevent water penetration and provide exceptional hot tire resistance. There is a sealer available to meet any of your concrete needs.



PERMA-CRETE® INT./EXT. ACRYLIC MASONRY SURFACE SEALER

4-808 & 4-809

- Clear or pigmented waterborne acrylic sealer
- Fast drying
- Deeply penetrates and seals new, porous surfaces and old, dusty or chalky paint films and substrates
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces and stucco
- Interior/Exterior
- Available in 1- and 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® EXTERIOR PIGMENTED BONDING COAT

- Superior deep penetrating, tintable, pigmented epoxy ester bonding primer
- Primes, seals and solidifies chalky masonry surfaces
- Specially recommended for tilt-ups
- Alkali & efflorescence resistant
- Apply to surfaces at 7 days and/or surface less than 13 pH
- Excellent adhesion

4-898

- Ideal for use on new or porous or badly weathered brick, stucco and other powdery surfaces
- Exterior
- Available in 1- and 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® AQUA-PEL™ CLEAR WATER REPELLENT 4-6100

- Clear, penetrating, non-film forming sealer
- Water repellent
- For use on above-grade, vertical and horizontal surfaces
- Ideal for use on architectural concrete, concrete block, splitface block, pavers, stucco, porous and dense brick, clay tile, exposed aggregate concrete, sandstone and slate
- Interior/Exterior
- Available as a concentrate in a 128 fl. oz. bottle
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE[®] PLEX-SEAL[™] INT./EXT. CLEAR SEALER

- 4-6200
- Clear, film-forming sealer
- Water repellent
- For use on above-grade, vertical and horizontal surfaces
- Ideal for use on masonry, concrete, brick, stone, stucco, mortar, non-glazed ceramic tile and exposed aggregate
- Interior/Exterior
- Available in 1- and 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

ELASTOMERICS 4-110 / 4-210 / 4-310

Elastomerics have the ability to bridge cracks that develop in a masonry wall. Specially formulated for flexibility, elastomerics can stretch and contract to accommodate substrate movement resulting from temperature change. This flexible crack-bridging ability results in a long-lasting, uniform finish that enhances the appearance of the masonry building.



PERMA-CRETE® PITT-FLEX® ELASTOMERIC COATING 4-110

- 100% acrylic, high build elastomeric
- Smooth finish
- For use on horizontal and vertical, above-grade surfaces
- Bridges cracks and masks surface imperfections
- Apply to surfaces at 7 days and/or surface less than 13 pH
- Resists wind-driven rain with two coats @ 6.5 mils each
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco and tilt-up
- Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® PITT-FLEX® ELASTOMERIC COATING 4-210

- 100% acrylic, high build elastomeric
- Textured finish
- For use on horizontal and vertical, above-grade surfaces
- Bridges cracks and masks surface imperfections
- Apply to surfaces at 7 days and/or surface less than 13 pH
- Resists wind-driven rain with two coats @ 6.5 mils each
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco and tilt-up
- Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® MATTE-FLEX® ELASTOMERIC COATING 4-310

- 100% acrylic, high build elastomeric
- Smooth / lower sheen finish
- For use on horizontal and vertical, above-grade surfaces
- Bridges cracks and masks surface imperfections
- Apply to surfaces at 7 days and/or surface less than 13 pH
- Resists wind-driven rain with two coats @ 6.5 mils each
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco and tilt-up
- Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

TEXTURED COATINGS 4-50 / 4-60 / 4-65 / 4-70 / 4-9110

Textured coatings are designed to be applied over concrete, cinder block and stucco surfaces to create a protective layer and provide waterproofing with enough flexibility to bridge gaps and cracks. The texture of the coating also helps aesthetically by hiding surface imperfections.



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PERMA-CRETE[®] 100% ACRYLIC TEXTURE COATING - FINE 4-50

- 100% acrylic texture coating
- Fine texture
- For use on horizontal and vertical, above-grade, pre-cast and tilt-up masonry substrates
- Minimizes surface imperfections
- Provides a decorative appearance
- Ideal for use on brick, concrete, concrete block (CMU), masonry, metal, plaster, plywood, stone and stucco
- Interior/Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® 100% ACRYLIC TEXTURE COATING - MEDIUM 4-60

- 100% acrylic texture coating
- Medium texture
- For use on horizontal and vertical, above-grade, pre-cast and tilt-up masonry substrates
- Minimizes surface imperfections
- Provides a decorative appearance
- Ideal for use on brick, concrete, concrete block (CMU), masonry, metal, plaster, plywood, stone and stucco
- Interior/Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® 100% ACRYLIC TEXTURE COATING - LIGHTWEIGHT MEDIUM 4-65

- 100% acrylic texture coating
- Medium texture Vermiculite
- For use on horizontal and vertical, above-grade, pre-cast and tilt-up masonry substrates
- Minimizes surface imperfections
- Provides a decorative appearance
- Ideal for use on brick, concrete, concrete block (CMU), masonry, metal, plaster, plywood, stone and stucco
- Interior/Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

TEXTURED COATINGS (CONT.) 4-50 / 4-60 / 4-65 / 4-70 / 4-9110



PERMA-CRETE® 100% ACRYLIC TEXTURE COATING - COARSE 4-70

- 100% acrylic texture coating
- Coarse texture
- For use on horizontal and vertical, above-grade, pre-cast and tilt-up masonry substrates
- Minimizes surface imperfections
- Provides a decorative appearance
- Ideal for use on brick, concrete, concrete block (CMU), masonry, metal, plaster, plywood, stone and stucco
- Interior/Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® EXTERIOR SOLVENT ACRYLIC MASONRY COATING 4-9110

- A high build, solventborne acrylic coating
- Can be applied down to temperatures of 20°F
- Smooth texture
- Self priming
- Bridges hairline cracks
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco and tilt-up
- Exterior
- Available in 5-gallon pails
- VOC compliant Lower than current Federal AIM Regulations

TOPCOATS (VERTICAL ABOVE-GRADE) 4-22 / 4-30 / 4-5110 / 4-5130 / 4-5140

PERMA-CRETE's high-performance, vertical above-grade topcoats can provide quality, protection and beauty on a range of masonry projects. These coatings protect your concrete substrate against severe sun, wind-driven rain, heat, humidity, dirt, salt air and efflorescence – both enhancing and protecting the appearance of the concrete.



PERMA-CRETE[®] HIGH BUILD 100% ACRYLIC TOPCOAT 4-22 / 4-30

- A high build acrylic topcoat
- For use on vertical, above-grade surfaces
- Apply to surfaces at 7 days and/or surface less than 13 pH
- Resists wind-driven rain with two coats @ 5 mils each
- Ideal for use on brick, concrete, concrete block (CMU), stucco and tilt-up
- Interior/Exterior
- Available in 1- and 5-gallon pails
- Available in two bases
- VOC compliant Lower than current Federal AIM Regulations

PERMA-CRETE® VERTICAL CONCRETE STAIN

VCS 4-5110 / 4-5130 / 4-5140

- A quick-drying opaque water repellent, recoat in fifteen minutes
- For use on vertical, above-grade, pre-cast and tilt-up masonry substrates
- Resists salt spray and dirt
- Apply to surfaces at 7 days and/or surface less than 13 pH
- Can be applied down to temperatures of 35°F
- Ideal for use on brick, concrete, concrete block (CMU), cinder block, fiber cement siding, masonry surfaces, stucco and tilt-up
- Exterior
- Available in 5-gallon pails
- Available in three bases
- VOC compliant Lower than current Federal AIM Regulations

TOPCOATS (HORIZONTAL CAPABLE) 4-4210 / 4-4220 / 4-4240

Concrete stain can transform a drab driveway, patio or sidewalk with a great new look while protecting the surface from the elements.



PERMA-CRETE[®] COLOR SEAL[™] WB INT./EXT. ACRYLIC CONCRETE STAIN

- 4-4210 / 4-4220 / 4-4240
- Film forming, tintable, waterborne, acrylic concrete stain
- Water and chemical resistant
- Minimizes stains and discoloration
- For use on above-grade, vertical and horizontal surfaces
- Ideal for use on masonry, concrete, brick, stone, stucco, mortar, non-glazed ceramic tile
- Interior/Exterior
- Available in 1- and 5-gallon pails
- · Available in three bases
- VOC compliant Lower than current Federal AIM Regulations

	FEATURES AND BENEFITS															
PERMA-CRETE	Product Code	Interior / Exterior Use	Ceiling* / Vertical / Horizontal Use	Color	Texture	Tintable	Sheen	VOC (g/L)	Coverage (ft²/gal)	Application Temp Range (air, surface, paint)	Optimum Paint Temp	Low Temp Capability	Alkali-Resistant	Efflorescence- Resistant	Binds / Restores Chalky Surfaces	Water Repellent
LTC (Low Temp.) Concrete Block & Masonry Surfacer	4-100	I/E	C/V	White	Smooth	No	Flat	60	80-100	35-100°F	50-90°F	35°F	Х	Х		
High Build 100% Acrylic Primer	4-2	I/E	C/V	White	Smooth	Yes	Flat 0-3 (85°)	99	200-250	35-100°F	50-90°F	35°F	Х	х		
Concrete and Stucco Primer	4-503	Е	C/V	White	Smooth	Yes	Flat 0-5 (60°)	85	250-400	50-100°F	50-90°F	50°F	Х	Х		
Int./Ext. Alkali Resistant Primer	4-603	I/E	C/V	White	Smooth	Yes	Non-Flat >5	99	400-500	35-100°F	50-90°F	35°F	х	х		
Int./Ext. Acrylic Masonry Surface Sealer - Clear	4-808	I/E	C/V	Clear	Smooth	No	Satin/Flat	228	200-400	35-100°F	50-85°F	35°F			Х	
Int./Ext. Acrylic Masonry Surface Sealer - Pigmented	4-809	I/E	C/V	Pigmented	Smooth	Yes	Satin/Flat	231	200-400	35-100°F	50-85°F	35°F			Х	
Pigmented Bonding Coat	4-898	E	V	Pigmented	Smooth	Yes	Flat 0-5	396	250-400	35°F	50-85°F	35°F	Х	Х	Х	
Aqua-Pel™ Clear Water Repellent	4-6100	I/E	C/V/H	Clear Concentrate	Smooth	No	N/A	329 as applied	40-175	50-100°F	50-90°F	50°F				х
Plex-Seal [™] WB Int./Ext. Clear Sealer	4-6200	I/E	C/V/H	Clear	Smooth	No	Satin	152	300-500	35-100°F	50-90°F	35°F	Х	Х		
PITT-FLEX® Elastomeric Coating - Smooth	4-110	E	C/V	White	Smooth	Yes	Flat 1-7 (60°)	98	100-135	50-100°F	50-90°F	50°F	Х	Х		
PITT-FLEX [®] Elastomeric Coating - Textured	4-210	Е	C/V	White	Textured	Yes	Flat 1-7 (60°)	88	100-135	35-100°F	50-90°F	35°F	Х	х		
MATTE-FLEX™ Elastomeric Coating - Smooth	4-310	E	C/V	White	Smooth	Yes	Flat 1-4 (85°)	95	100-135	35-100°F	50-90°F	35°F	Х	Х		
100% Acrylic Textured Coatings - Fine	4-50	I/E	C/V	White	Fine	Yes	Flat 0-3 (85°)	57	125-135	50-100°F	50-90°F	50°F	Х	Х		
100% Acrylic Textured Coatings - Medium (Hard)	4-60	I/E	C/V	White	Medium - Hard	Yes	Flat 0-3 (85°)	56	125-135	50-100°F	50-90°F	50°F	Х	Х		
100% Acrylic Textured Coatings - Medium (Soft)	4-65	I/E	C/V	White	Medium - Soft	Yes	Flat 0-3 (85°)	58	125-135	50-100°F	50-90°F	50°F				
100% Acrylic Textured Coatings - Coarse	4-70	I/E	C/V	White	Coarse	Yes	Flat 0-3 (85°)	56	125-135	50-100°F	50-90°F	50°F	Х	Х		
Solvent Acrylic Masonry Coating - Smooth	4-9110	E	C/V	White	Smooth	Yes	Flat 0-5 (85°)	400	100	20-90°F	50-80°F	20°F	Х	Х		
High Build 100% Acrylic Topcoat	4-22	I/E	C/V	White	Smooth	Yes	Flat 0-3 (85°)	98	125-225	35-100°F	50-90°F	35°F	Х	Х		
High Build 100% Acrylic Topcoat	4-30	I/E	C/V	Deep	Smooth	Yes/ Must	Flat 0-3 (85°)	96	125-225	35-100°F	50-90°F	35°F	х	х		
Vertical Concrete Stain VCS	4-5110	Е	C/V	White	Smooth	Yes	Flat 0-5 (85°)	85	50-225	35-100°F	50-90°F	35°F	Х	Х		Х
Vertical Concrete Stain VCS	4-5130	Е	C/V	Deep	Smooth	Yes	Flat 0-5 (85°)	95	50-225	35-100°F	50-90°F	35°F	Х	Х		Х
Vertical Concrete Stain VCS	4-5140	E	C/V	Ultra Deep	Smooth	Yes	Flat 0-5 (85°)	99	50-225	35-100°F	50-90°F	35°F	Х	Х		Х
Color Seal [™] WB Int./Ext. Acrylic Concrete Stain	4-4210	I/E	C/V/H	White/Pastel	Smooth	Yes	Satin	184	Up to 800	35-100°F	50-90°F	35°F				Х
Color Seal™ WB Int./Ext. Acrylic Concrete Stain	4-4220	I/E	C/V/H	Midtone	Smooth	Yes	Satin	196	Up to 800	35-100°F	50-90°F	35°F				Х
Color Seal [™] WB Int./Ext. Acrylic Concrete Stain	4-4240	I/E	C/V/H	Ultra Deep	Smooth	Yes	Satin	196	Up to 800	35-100°F	50-90°F	35°F				Х

											SUBSTRATE																	
Wind-Driven Rain-Resistant	Water Vapor Permeability (dry cup)	Flexibility	UV-Resistant	Elongation	Mildew-Resistant	Stain Blocking	Chemical-Resistant ***	Hot Tire-Resistant	Salt Spray	Accelerated Weathering	Dry Time (to recoat)	Self Priming	Lightweight	Adhesion	Brick	Concrete	Concrete / Cinder Block	Fiber Cement Siding	Masonry Surfaces	Stucco	Titt-Up	Exposed Aggregate	Split Face Block	Non-Glazed Clay / Ceramic Tile	Slate, Sandstone	Wood	Plaster	Wallboard
Х											24 hours		Х	Х	Х	Х	Х	Х	Х	Х	Х							
X**		х									24 hours			Х	х	Х	Х		Х	Х	Х							
					Х						1-2 hours			Х	х	Х	Х	Х	Х	Х	Х							
		х	х		х	х					1-24 hours (24 for max. stain resist.)			х	х	х	х	х	х	х	х					х	х	х
											1-3 hours				Х	Х	Х	Х	Х	Х								
											1-3 hours				х	Х	Х	Х	Х	Х								
							Х				24 hours			Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х		Х	
							Х	Х			2 coats wet-on-wet				Х	х	х		х	х	х	х	х	х	х			
					Х		Х	Х		Х	2 hours			Х	Х	Х	Х		Х	Х	Х	Х		Х				
Х	13	Х	Х	429% 2 coats	Х						4 hours minimum				Х	Х	Х	Х	Х	Х	Х							
Х	40	Х	х	462% 2 coats	Х						4 hours minimum				х	Х	Х	Х	Х	Х	Х							
X**	10	Х	Х	388% 2 coats	Х						4 hours minimum				х	Х	Х	Х	Х	Х	Х							
X**	>15				Х						12-16 hours				Х	Х	Х	Х	Х	Х	Х							
X**					х						12-16 hours				х	Х	х	Х	Х	Х	х							
					Х						12-16 hours				х	Х	Х	Х	Х	Х	Х							
					Х						12-16 hours				х	Х	Х	Х	Х	Х	Х							
			Х	>500% 2 coats			Х				16-24 hours	Х			Х	Х	Х	Х	Х	Х	Х							
Х	>15	Х	Х	240% 2 coats	Х						24 hours				Х	Х	Х	Х	Х	Х	Х							
X**		х	х		х						24 hours				х	х	х	х	х	х	х							
	>15				Х				Х	Х	15 minutes	Х		Х	х	Х	Х	Х	Х	Х	Х							
									Х	Х	15 minutes	Х		х	х	Х	Х	Х	Х	Х	х							
									Х	Х	15 minutes	Х		Х	Х	Х	Х	Х	Х	Х	Х							
			Х		Х		Х	Х			6 hours	Х		Х	Х	Х	Х		Х	Х	Х	Х		Х				
			Х		Х		Х	Х			7 hours	Х		Х	Х	Х	Х		Х	Х	Х	Х		х				
			Х		Х		Х	Х			8 hours	X		Х	Х	Х	Х		Х	X	X	Х		Х				

X* Excludes parking lot ceilings | X** = Passes as a system 4-100, 4-2, plus 4-22, 4-30, 4-50, 4-60 or 4-310 | X*** See technical data sheet for details

NOTES



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