



Bridge & Wall Coatings

Products to Cure,
Protect and Beautify
Concrete

58

Years of American-Made Products

1957
2015



Our Knowledge is **Concrete**SM



ChemMasters[®]

One of the Broadest Offerings of Products for Concrete Bridges and Walls



ChemMasters' coatings protect many of the nation's most recognizable and strategically important structures. From military defense to transportation, infrastructure to commercial buildings...ChemMasters' coatings protect, beautify and prolong the life of concrete.

Wherever concrete is exposed to the elements, ChemMasters has a coating to suit your needs.

- **Departments of Transportation (DOT) & Municipal Engineering**

- Bridges
- Sound Wall Barriers

- **Commercial Buildings**

- Building Exteriors
- Retaining Walls

- **Residential**

- Stucco Exteriors
- Exposed Block Foundations
- Retaining Walls

ChemMasters offers a full range of chemistries to meet the demanding needs of harsh environments and the aesthetic requirements of any home or building owner. ChemMasters architectural coatings are the culmination of cutting edge development in materials, formulations, and performance. And they're true to our philosophy of manufacturing world-class products to protect and beautify concrete.

Epoxy / Urethane Systems

Epoxy/urethane coating systems are the preferred means of protecting high value concrete structures with extended design lives. As a system created expressly for concrete, their adhesion, UV stability, and waterproofing capabilities are proven technologies for long-term (15+ year) protection.

Safe-Cure® & Seal EPX

A low V.O.C., two-component, water-based epoxy curing and sealing compound for concrete. It is also suitable for use as an epoxy primer or coating for cured concrete. Available in either clear or pigmented formulations. For exterior applications without a topcoat, a special ultraviolet (UV) resistant formulation is available upon request. Meets ASTM C 1315.

Duraguard™ 310 CRU

A two component, chemical resistant aliphatic polyurethane coating. It may be used as a topcoat over epoxy and epoxy novalac systems to improve chemical, ultraviolet light and graffiti resistance. Available in clear or pigmented versions.

Green-Thane 310 CRU

An environmentally friendly two component, waterborne aliphatic, chemical resistant polyurethane coating. Used as a topcoat over epoxy coatings to improve the chemical, UV, abrasion and graffiti resistance of the coating system. Available in clear or pigmented versions.

Safe-Cure® & Seal EPX

Film Formation	Cross-Linking	Dry Film Thickness	2.5 mil clear 3.3 mil colors
Recoat Time	Tack free up to 72 hours (call ChemMasters for instructions past 72 hours)	Percent Solids Clear Pigmented	31% 40 – 45%
Curing Efficiency	ASTM C 1315, Type 1, Class B	Moisture Loss ASTM C 156	< 0.40 g/cm ² in 72 hours
Water/Salt Resistance NCHRP 244 Series II & Series IV	86 – 92% Reduction	Abrasion Resistance Tabor 1000g/1000 cycles/ CS-17 Wheels	33.1 mg
Abrasion & Impact Resistance	Excellent	Shear Bond Strength—7 Days ASTM C 882	1,000 psi (21.4 MPa)
Tensile Bond Strength—7 Days Fresh Concrete Etched or Blasted	215-220 psi (1.4-1.5 MPa) 350-450 psi (2.4-3.1 MPa)	Gloss Retention	Excellent/Good
Color Retention	Moderate	Drying Time	< 4 hours
Pot Life	30 minutes		

Duraguard™ 310 CRU & GreenThane 310 CRU

Film Formation	Cross-Linking	Dry Film Thickness	5 – 9 mil
Water Resistance	0.2 – 0.4%	Percent Solids	66 – 72%
Water/Salt Resistance NCHRP 244 Series II & Series IV	86 – 92%	Water Absorption ASTM C 642 – 2 day/50 day	< 0.5% / < 2.0%
Salt Resistance ASTM B 117 73, 2,000 hrs	No Effect	QUV Weathering – 8,000 hrs ASTM D 4587	98% Gloss Retention 1ΔE Shift
Efflorescence Resistance	Excellent	Deicer Scaling ASTM C 672	100 cycles
Abrasion & Impact Resistance	Excellent	Abrasion Resistance Tabor 1000g/1000 cycles/ CS-17 Wheels	25 grams
Color Retention	Excellent/Superior	Adhesion	> 150 psi
Tensile Strength	2,200 psi	Gloss Retention	Excellent/Superior
Durability	15+ Years	Percent Elongation	50 – 100%
Solvent Resistance 100 Double Rubs	No Effect	Pencil Hardness ASTM D 3363	> 2H

Markets: DOT / Municipal – Bridge Parapets, Bridge Columns, Precast Spans, Bridge Substructure & Superstructure

100% Acrylic Coatings

ColorCoat™

A heavy bodied 100% acrylic emulsion decorative coating specifically formulated to withstand outdoor exposure on concrete, masonry, stucco or cement plaster. It develops a tough durable water repellent film that is UV-stable, high gloss, alkali, and acid resistant.



USES

- Exterior or interior, vertical and overhead, concrete and masonry
- Poured in place, formed walls, block, brick, or stucco
- Functional and decorative water repellent finish
- Provides a uniform matte color following repairs of deteriorated surfaces

ADVANTAGES

- Excellent adhesion and weathering properties
- Superior moisture vapor transmission through substrate reduces cracking and peeling
- Protects against airborne dirt and pollutants
- Non-yellowing and fade resistant
- Available in a wide variety of colors

ColorCoat™

Film Formation	Evaporation/Coalescence	Salt Spray ASTM B 117 – 2,000 hours	No Effect
Water Resistance	1 – 2%	Water Absorption ASTM C 642 – 2 day/50 day	< 0.5% / < 2.0%
Water/Salt Resistance NCHRP 244	75 – 80%	Freeze/Thaw Cycling – 300 Cycles ASTM C 666	97 Durability Factor
Deicer Scaling – 50 Cycles ASTM C 672	Visual Rating – 0 Scaling Mass – 0	Adhesion – Direct Tensile	> 150 psi
Weatherometer ASTM G 26	5,000 hours, No Peeling	Gloss Retention	Very Good
Adhesion - Blister Box Method	2,000 hours No Blistering or Peeling	Percent Elongation	10 – 20%
Fading (Fade-O-Meter)	100 hours	1/8" Mandrel Flexibility	75°F (24°C) pass 0°F (-17°C) pass -15°F (-26°C) pass
Tensile Strength	800 psi	Fire Hazard ASTM E 84	Smoke density, fuel contribution & flame spread all <25 (NFPA Class A)
Durability	10+ Years		
Moisture Vapor Transmission Rate ASTM D 1653	18 perms @ 6 mil dry film thickness		
Dry Film Thickness	12 – 14 mil (2 coats)		
Percent Solids	58 – 62%		

Markets: DOT / Municipal – Sound Wall Barriers, Bridge Parapets, Bridge Columns, Precast Spans, Bridge Substructure & Superstructure

Commercial – Building Exteriors, Masonry/Block Walls, Retaining Walls

Residential – Stucco, Exterior Above-Ground Foundations, Retaining Walls

100% Elastomeric Acrylic Coating

ColorLastic™

A pigmented, waterproof coating for concrete and masonry. ColorLastic is produced with 100% elastomeric acrylic resins and formulated for superior aging characteristics. ColorLastic bridges hairline cracks, withstands substrate movement and accommodates rapid changes in temperature.



USES

- Coating for exterior or interior, above grade vertical and overhead concrete and masonry
- Functional, yet decorative, waterproof sealer for poured in place concrete, precast members, block, brick, plaster or stucco surfaces.
- Topcoat for ChemSeal or other cementitious coatings
- Provides a uniform matte color following repairs of deteriorated surfaces exposed to severe weathering

ADVANTAGES

- Exceptionally durable film resists wind driven rain, mold, mildew, and dirt
- Excellent elongation and recovery properties
- Optimum water vapor permeability eliminates cracking and peeling
- Withstands extremes in thermal cycling; maintains flexibility from season to season
- Ultraviolet (UV) light, stable, fade resistant
- Seals and waterproofs hairline cracks
- Extremely low V.O.C. content, water based for environmental impact compliance
- Available in nine architectural colors; special color matching available subject to minimum order and lead time requirements

ColorLastic™

Film Formation	Evaporation/Coalescence	Dry Film Thickness	16 mil – 2 coats @ ft ² per gallon
Water Resistance	0.5 – 1.0%	Salt Spray ASTM B 117	300 hours
Water/Salt Resistance NCHRP 244	75 – 80%	Water Absorption ASTM C 642 – 2 day / 50 day	< 0.5% / < 2.0%
Deicer Scaling – 50 Cycles ASTM C 672	Visual Rating – 1 Scaling Mass – 0	Freeze/Thaw Cycling – 300 Cycles, ASTM C 666	97 Durability Factor
Weatherometer – 5,000 hours ASTM G 26	No Peeling or Delamination	Adhesion – Direct Tensile	> 75 psi
Abrasion & Impact Resistance	Good	Percent Solids	60 – 62%
Color Retention	Very Good	Gloss Retention	Very Good
Tensile Strength ASTM D 412 modified	200 psi (1.4 MPa) @ 75°F (24°C) 600 psi (4 MPa) @ 0°F (-17°C)	Percent Elongation	200 – 300%
Durability	10+ Years	1/8" Mandrel Flexibility	75°F (24°C) pass 0°F (-17°C) pass -15°F (-26°C) pass
Water Vapor Transmission ASTM E 96	10.5 perms @ 20 mil film	Tensile Elongation ASTM D 412	300% @ 75°F (24°C) 115% @ 0°F (-17°C)
		Wind Driven Rain Resistance Fed Spec TT-C-555-B	Water Penetration – None Blister Density/Size – None

Markets: DOT / Municipal – Sound Wall Barriers, Bridge Parapets, Bridge Columns, Precast Spans, Bridge Substructure & Superstructure

Commercial – Building Exteriors, Masonry/Block Walls, Retaining Walls

Residential – Stucco, Exterior Above-Ground Foundations, Retaining Walls

Silicone Modified Elastomeric Acrylic Coating

ColorLasticSil™

Pigmented waterproof coating for concrete and masonry. ColorLasticSil is produced with 100% elastomeric silicone modified acrylic resins and formulated for superior aging characteristics. ColorLasticSil bridges hairline cracks, withstands substrate movement and accommodates rapid changes in temperature.

Markets: DOT / Municipal – Sound Wall Barriers, Bridge Parapets, Bridge Columns, Precast Spans, Bridge Substructure & Superstructure
Commercial – Building Exteriors, Masonry/Block Walls, Retaining Walls
Residential – Stucco, Exterior Above-Ground Foundations, Retaining Walls

Heavy Bodied, 100% Acrylic Emulsion, Decorative Coatings

TextureDOT™

A heavy bodied, 100% acrylic emulsion, decorative, textured coating. It develops a tough, durable, water repellent film that is alkali, acid and mildew resistant. TextureDOT meets ASTM C 1315 as an architectural cure & seal, and is also available in a smooth version.

USES

- Interior or exterior, vertical and overhead concrete and masonry surfaces
- Poured and formed walls, block, brick, cement plaster, stucco, wall board, and sheet rock
- Sealing jersey and median barriers, sound barrier walls, bridge abutments, and retaining walls
- Decorative water repellent finish
- Textured finish hides defects in the substrate

ADVANTAGES

- Superior color stability under harsh ultraviolet light exposure
- Excellent hiding power minimizes minor surface imperfections and defects
- Resistant to stains, dirt, and atmospheric pollutants
- Provides uniformly colored, textured finish
- Exceptional moisture vapor transmission
- Will not crack or peel
- Expansion and contraction characteristics compatible with concrete and masonry surfaces
- Durable, outlasts standard paints 2:1
- Available in 9 standard colors or any federal color for DOT applications.



TextureDOT™

Film Formation	Evaporation/Coalescing	Salt Spray – 2,000 hours ASTM B 117	No Effect
Percent Solids	72 – 74%	Deicer Scaling – 50 Cycles ASTM C 672	Visual Rating – 0 Scaling Mass – 0
Water/Salt Resistance NCHRP 244, Series II & IV	21 days immersion, 6 months - slab	Freeze/Thaw Cycling – 300 Cycles, ASTM C 666	98 Durability Factor
Weatherometer – 5,000 hours ASTM G 23	No Peeling or Delamination	Mandrel Flexibility	180° bend over 1" mandrel
Impact Resistance ASTM D 2794	24 in-lbs direct impact	Abrasion Resistance – 3,000 Liters Falling Sand, ASTM D 968	No Peeling or Delamination
Adhesion – Blister Box Method, 2,000 hours	No Blistering or Peeling	Durability	12+ Years
Dry Film Thickness	23 mil per coat @ 50 ft ² per gallon		

Markets: DOT / Municipal – Sound Wall Barriers, Jersey Barriers
Commercial – Building Exteriors, Masonry/Block Walls, Retaining Walls
Residential – Stucco, Exterior Above-Ground Foundations, Retaining Walls

Pigmented Silicate Penetrating Treatment for Concrete & Masonry

ColorSil™

An advanced alternative to standard concrete and masonry paints, stains or tintable surface sealers. The unique composition of ColorSil's potassium silicate binder coupled with inorganic pigments and silicone emulsions produce a colored penetrating treatment virtually unaffected by ultraviolet light.

ColorSil penetrates the substrate to eliminate blistering or peeling due to entrapped moisture. It may be used as a pigmented coating in a two part system with a penetrating water repellent such as Aquanil Plus 100™ to add long-term water repellency with maximum permeability.

USES

- Interior or exterior, vertical or overhead, concrete and masonry surfaces
- Protects substrates from long term effects of water, environmental factors and pollution
- Poured in place or precast concrete, concrete block or brick, split face block
- Fired brick, stucco, cement plaster, architectural facades, and wood
- Provides a uniform appearance on restoration projects



ColorSil with Aquanil Plus 100 water repellent pre-treatment was used on a ten year project to rebuild the Pentagon.

ADVANTAGES

- Combines the features of chemical hardening and bonding with high water vapor permeability
- Penetrates deeply into and chemically reacts with substrate for exceptional durability and water repellency
- Improves abrasion resistance and eliminates blistering and peeling caused by entrapped substrate moisture
- Compatible with most corrosion inhibitors applied prior to ColorSil application
- Compatible with primer silane treatments for improved waterproofing protection
- VOC compliant, environmentally safe
- Cures to a natural matte finish maintaining the aesthetic appearance of the substrate
- Resists aggressive atmospheric conditions, exhaust gases, acid rain and airborne pollutants

ColorSil™ over Aquanil™ Plus 100 (100% Silane Water Repellent & Pre-Treatment)

Film Formation	No film	Dry Film Thickness	N/A
Water Resistance	0.2%	Percent Solids	37 – 42%
Water/Salt Resistance NCHRP 244, Series II & IV	21 days immersion, 6 months - slab	Scrub Resistance ASTM D 2486	> 150 cycles to break over cement tiles
Weatherometer – 5,000 hours ASTM G 26	No Peeling or Delamination	Wind Driven Rain ASTM E 514	No water leakage
Moisture Vapor Transmission Rate ASTM D 1653	Exceeds minimum 30 perms transmission	Freeze/Thaw Cycling – 300 Cycles ASTM C 666	97 Durability Factor
Abrasion Resistance Blister Box Method	2,000 hours	Fire Hazard ASTM E 84	NFPA Class A Smoke density, fuel contribution & flame spread all < 25
Mildew Resistance – 4 Weeks Exposure, ASTM D 3273	No Mold Growth	Color Retention Fade-O-Meter	100 hours
Durability	15+ Years	CO₂ Diffusion Resistance @ 10 dry mil	Engelfried 323,000µ – equivalent to 8" of concrete

Markets: DOT / Municipal – Sound Wall Barriers, Bridge Parapets, Bridge Columns, Precast Spans, Bridge Substructure & Superstructure

Commercial – Building Exteriors, Masonry/Block Walls, Retaining Walls

Residential – Stucco, Exterior Above-Ground Foundations, Retaining Walls

Cementitious Resurfacer

FinishCrete

A polymer modified, portland cement based compound for rubbing and resurfacing vertical or overhead concrete surfaces. FinishCrete has a smooth, rich texture for easy application and is specifically formulated to fill small voids and imperfections in concrete and masonry and create attractive architectural finishes.

USES

- Restore old and pitted vertical and overhead concrete surfaces
- Fill voids, honeycombs and holes in poured in place walls, tilt-up walls and masonry
- Repair concrete facings, walls, ceilings, beams, single and double tees and steps
- Repair surface damage due to shipping and assembly of precast members
- Fill voids, bugholes, narrow cracks, and surface imperfections
- Creates a uniform color and appearance

ADVANTAGES

- Superior bond and tensile strength even in very thin applications
- Excellent finishing characteristics for smoothing rough walls and beams
- Allows water vapor transmission for durable finish without popouts or blisters
- Restores the color and texture of damaged or stained older concrete
- Easy to apply by brush, roller or sprayer
- Easy to paint or recoat



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Anti-Graffiti Coatings

Graffiti Stopper

A two component polyester urethane developed specifically to protect surfaces from graffiti. Once applied to most surfaces, Graffiti Stopper will form a durable coating to reduce the adhesion of most coatings, paints and inks to the surface. Paints will typically bead on the surface and make the development of letters or designs difficult. Once dried on the surface, paints or inks can be removed without the use of harsh chemicals. Graffiti can be removed with **Graffiti Eraser** from ChemMasters and a pressure washing without leaving a shadow on the surface or damaging the coating. Available in high gloss, satin, or flat finishes.

USES

- Exterior concrete, masonry, metal or galvanized metals
- Traffic signs, rail cars, sound barriers, bridges, bathroom stalls, schools or other areas subject to attack by graffiti

ADVANTAGES

- Treated surfaces are easy to clean
- Adheres tenaciously to a wide variety of substrates
- Protects surfaces regardless of substrate texture (Smooth surfaces will clean more easily)
- UV stable and will not yellow
- Easily mixed and applied with brush, roller or sprayer

Graffiti Seal

A single component, water based, sacrificial coating system for easy and environmentally safe removal of graffiti.

USES

- Exterior concrete, masonry, metal or galvanized metals
- Traffic signs, rail cars, sound barriers, bridges, bathroom stalls, schools, or other areas subject to attack by graffiti

ADVANTAGES

- Complies with National Volatile Organic Compound Emission Standards for Architectural Coatings, Federal EPA Regulation 40 CFR Part 59
- 0% V.O.C. content, biodegradable, odorless
- Breathable for excellent moisture vapor transmission
- Easy to apply and remove
- Will not change the appearance of the substrate
- Durable and non-yellowing

