



PARIC CORPORATION
77 Westport Plaza Suite 250
St. Louis, MO 63146
TEL: 636-561-9500
FAX: 636-561-9501

REQUEST FOR INFORMATION	DATE: May 24, 2017	NO.: RFI-547
--------------------------------	---------------------------	---------------------

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Devin Gates

Project Name:	15051-Webster University Interdisciplinary Science Building	Project No.: 15051
---------------	---	--------------------

Subject: Bollard primer clarifications

Response Required By: May 31, 2017

Drawing / Spec Reference:

Information Requested:

See attached product data for Sherwin Williams for both DTM Acrylic (for reference only, this RFI is for primer) and Zinc Clad III HS (to be submitted for approval as an alternate primer for use on bollards).

Per 055000-2.13-B; we are to prime the bollards with 'zinc-rich primer' (after they are SSPC-SP6 'commercial blast cleaned' per 055000-2.16-C).

Per 055000-2.4.C, the zinc-rich primer needs to comply with SSPC-Paint 20 ('zinc') or 29, and be compatible with the topcoat.

Per 099113-3.6-A-d-1, the Sherwin Williams primer is to be S-W Pro-Cryl Universal Primer B66-310 series - however, per the Sherwin Williams rep (Matt Boxdorfer 314-621-8965) this is not a zinc rich primer.

Per 099113-3.6-A-d-2; the Sherwin-Williams topcoat is to be S-W DTM Acrylic Coating S/G B66-200.

Sherwin-Williams recommends to use their 'Zinc Clad iii HS' organic zinc-rich epoxy primer (which does require a SSPC-SP6 blast, in agreement with 055000-2.16-C-1) in lieu of the S-W Pro-Cryl Universal Primer B66-310 series (which is not 'zinc-rich')

The proposed S-W 'Zinc Clad III HS' is compatible with the S-W "DTM Acrylic Coating S/G B66-200"

Suggestion: Please advise if the S-W Zinc Cladd III HS will be an acceptable primer for exterior bollards, please advise of an alternate if not.

Atlas may alternatively hot-dip galvanize these bollards at no additional cost if preferred.

Response:

Answered By: _____

Date: _____



ARCHITECT'S RESPONSE:

This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

PROVIDE PRIMER FOR BOLLARDS PER SPECIFICATION 055000. PROPOSED PRIMER IS ACCEPTABLE PROVIDED IT MEETS THE SPECIFICATION 055000.

Answered By: Kelvin Patel

Date: 05/26/2017



Protective & Marine Coatings

DTM ACRYLIC COATING

FOR REFERENCE ONLY

B66-100 SERIES
B66-200 SERIES

GLOSS
SEMI-GLOSS

Revised: June 12, 2014

PRODUCT INFORMATION

1.25

PRODUCT DESCRIPTION

DTM ACRYLIC COATING is a 100% acrylic, water reducible, corrosion resistant coating for light to moderate industrial use. Designed for new construction or maintenance use and can be used directly over prepared substrates.

- Chemical resistant
- Fast dry
- Flash rust/early rust resistant
- Interior/exterior use
- Single component
- Outstanding application characteristics
- Corrosion resistant
- Low odor, Low VOC

PRODUCT CHARACTERISTICS

Finish:	Gloss or Semi-Gloss
Color:	Wide range of colors including safety colors
Volume Solids:	38% ± 2%, may vary by color
Weight Solids:	48% ± 2%, may vary by color
VOC (EPA Method 24):	<250 g/L; 2.08 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	6.5 (165)	10.0 (250)
Dry mils (microns)	2.5 (63)	4.0 (100)
~Coverage sq ft/gal (m²/L)	155 (3.8)	250 (6.1)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	608 (14.9)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 8.0 mils wet (200 microns):

	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 110°F/43°C
To touch:	1.5 hours	1 hour	30 minutes
Tack free:	6 hours	4 hours	2 hours
To recoat:	6 hours	4 hours	2 hours
To cure:	30 days	30 days	30 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 50°F (10°C) to 100°F (38°C)
Flash Point:	>200°F (93°C), PMCC
Reducer:	Water R8K10 - WB Hot Weather Reducer up to 10%
Clean Up:	Water

RECOMMENDED USES

For use over prepared:

- Steel
- Aluminum
- Drywall
- Water treatment plants
- Galvanizing
- Concrete
- Zinc rich primers
- Wood
- Masonry

Examples:

- Buildings
- Machinery
- Power plants
- Storage Tank Exteriors
- Suitable for use in USDA inspected facilities
- Conforms to AWWA D102 OCS #3
- Acceptable for use in high performance architectural applications.
- Complies with performance criteria of SSPC Paint 24.
- Equipment
- Piping
- Structural Steel
- New Construction
- Select Marine Structures
- Water treatment plants

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10

System Tested*:

2 cts. DTM Acrylic Coating @ 3.0 mils (75 microns) dft/ct
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1kg load	107 mg loss
Accelerated Weathering	ASTM D4587, QUV-A, 5,000 hours	Passes
Adhesion	ASTM D4541	>500 psi
Corrosion Weathering	ASTM D5894, 15 cycles, 5,040 hours	Rating 9 per ASTM D610 for rusting ; Rating 10 per ASTM D714 for blistering
Direct Impact Resistance	ASTM D2794	>160 in. lbs.
Dry Heat Resistance	ASTM D2485	300°F (149°C)
Exterior Durability	1 year, 45° South	Excellent
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Moisture Condensation Resistance (2 coats)	ASTM D4585, 100°F (38°C), 300 hours	Passes
Pencil Hardness	ASTM D3363	2B
Salt Fog Resistance	ASTM B117, 500 hours	Excellent
Flame Spread Rating	ASTM E84-91a	Flame Spread Index - 5 ; Smoke Density Index - 0

Provides performance comparable to products formulated to federal specification: AA50570, and Paint Specification: SSPC-Paint 23 and 24.



Protective & Marine Coatings

DTM ACRYLIC COATING

B66-100 SERIES
B66-200 SERIES

GLOSS
SEMI-GLOSS

Revised: June 12, 2014

PRODUCT INFORMATION

1.25

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct.	
		Mils	(Microns)
Steel:			
1 ct.	DTM Acrylic Primer/Finish	2.5-5.0	(63-125)
or	Kem Bond HS	2.0-5.0	(63-125)
or	Zinc Clad Primer	3.0-5.0	(75-125)
or	ProCryl Primer	2.0-4.0	(50-100)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Steel:			
2 cts.	DTM Acrylic Coating*	2.5-4.0	(63-100)
(Application of coating on unprimed bare steel may cause pinpoint rusting.)			
Aluminum:			
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Aluminum:			
1 ct.	DTM Wash Primer	0.7-1.3	(18-32)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Galvanizing:			
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Concrete Block:			
1 ct.	Heavy Duty Block Filler	10.0-18.0	(250-450)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Concrete/Masonry:			
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Drywall:			
1 ct.	ProMar 200 0 VOC Latex Wall Primer	1.0	(25)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Prefinished Siding: (Baked-on finishes)			
1 ct.	DTM Bonding Primer	2.0-5.0	(50-125)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Wood, exterior:			
1 ct.	Exterior Oil-Based Wood Primer	2.3	(58)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
Wood, interior:			
1 ct.	Premium Interior Wall & Wood Primer	1.8	(45)
2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)

*Safety Colors, Deep Base, and Ultradeep colors require a prime coat of DTM Acrylic Primer/Finish, B66W1, for maximum durability, adhesion, and corrosion protection.

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

* Iron & Steel: SSPC-SP2
Aluminum: SSPC-SP1
Galvanizing: SSPC-SP1
Concrete & Masonry: SSPC-SP13/NACE6 or ICRI No. 310.2R, CSP 1-3

Wood: Dry and sanded smooth. Primer required.

*Safety Colors, Deep Base, and Ultradeep colors require a prime coat of DTM Acrylic Primer/Finish, B66W1, for maximum durability, adhesion, and corrosion protection.

Surface Preparation Standards

Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal	Sa 3	Sa 3	SP 5	1
Near White Metal	Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast	Sa 2	Sa 2	SP 6	3
Brush-Off Blast	Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Ct St 2	Ct St 2	SP 2	-
Pitted & Rusty	D St 2	D St 2	SP 2	-
Rusty	C St 3	C St 3	SP 3	-
Power Tool Cleaning	Pitted & Rusty	D St 3	SP 3	-

TINTING

Tint with BAC, CCE, or EnviroToner at 100% tint strength, using the respective tinting formula pages. Better performance will be achieved with EnviroToners. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Tinting with BAC or CCE can affect the flash/early rust resistance of the coating.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 110°F (43°C) maximum (air, surface, and material)
Relative humidity: At least 5°F (2.8°C) above dew point
85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 (3.78L) and 5 gallon (18.9L) containers
Weight: 10.2 ± 0.2 lb/gal 1.22 Kg/L
May vary by color.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



Protective & Marine Coatings

DTM ACRYLIC COATING

B66-100 SERIES
B66-200 SERIES

GLOSS
SEMI-GLOSS

Revised: June 12, 2014

APPLICATION BULLETIN

1.25

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Iron & Steel

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6.

*Safety Colors, Deep Base, and Ultradeep colors require a prime coat of DTM Acrylic Primer/Finish, B66W1, for maximum durability, adhesion, and corrosion protection.

Aluminum

Remove all oil and grease per SSPC-SP1. Self-priming.

Galvanizing

The surface should be weathered for 6 months prior to painting. Remove all oil and grease per SSPC-SP1. Self-priming.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly cleaned and dry. Surface temperatures must be at least 55°F (13°C) before filling. Use Heavy Duty Block Filler. Filler must be thoroughly dry before topcoating per manufacturer's recommendations.

Wood

Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Previously Painted Surfaces

If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal	Sa 3	Sa 3	SP 5	1
Near White Metal	Sa 2.5	Sa 2.5	SP10	2
Commercial Blast	Sa 2	Sa 2	SP 6	3
Brush-Off Blast	Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	C St 2	C St 2	SP 2	-
Pitted & Rusted	D St 2	D St 2	SP 2	-
Rusted	C St 3	C St 3	SP 3	-
Power Tool Cleaning	Pitted & Rusted	D St 3	D St 3	SP 3

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 110°F (43°C) maximum
(air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer Water
R8K10 - WB Hot Weather Reducer
up to 10%

Clean Up Water

Airless Spray

Pressure.....1500 psi
Hose.....1/4" ID
Tip0.017" - .021"
Filter.....60 mesh
Reduction.....As needed up to 12½% by volume

Conventional Spray

GunBinks 95
Fluid Nozzle66
Air Nozzle.....63PB
Atomization Pressure.....50 psi
Fluid Pressure.....15-20 psi
Reduction.....As needed up to 12½% by volume

Brush

Brush.....Nylon / polyester
Reduction.....Not recommended

Roller

Cover3/8" woven solvent resistant core
Reduction.....Not recommended

If specific application equipment is not listed above, equivalent equipment may be substituted.



Protective & Marine Coatings

DTM ACRYLIC COATING

B66-100 SERIES

B66-200 SERIES

GLOSS

SEMI-GLOSS

Revised: June 12, 2014

APPLICATION BULLETIN

1.25

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	6.5 (165)	10.0 (250)
Dry mils (microns)	2.5 (63)	4.0 (100)
~Coverage sq ft/gal (m²/L)	155 (3.8)	250 (6.1)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	608 (14.9)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 8.0 mils wet (200 microns):

	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 110°F/43°C
To touch:	1.5 hours	1 hour	30 minutes
Tack free:	6 hours	4 hours	2 hours
To recoat:	6 hours	4 hours	2 hours
To cure:	30 days	30 days	30 days

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Safety Colors, Deep Base, and Ultradeep colors require a prime coat of DTM Acrylic Primer/Finish, B66W1, for maximum durability, adhesion, and corrosion protection.

Application temperature above 95°F (35°C) may cause dry spray, uneven sheen, and poor adhesion.

Application temperature below 50°F (10°C) may cause poor adhesion and lengthen the drying and curing time.

DTM Acrylic Coating is extremely sensitive to hydrocarbon containing solvents. When cleaning the surface per SSPC-SP1, use only an emulsifying industrial detergent followed by a water rinse.

Do not use hydrocarbon solvents for cleaning.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



Protective & Marine Coatings

ZINC CLAD® III HS ORGANIC ZINC-RICH EPOXY PRIMER

PART A
PART A
PART B
PART F

B69A100
B69LW100
B69V100
B69D11

GRAY-GREEN, BASE
OAP BLUE, BASE
HARDENER
ZINC DUST

Revised: August 04, 2016

PRODUCT INFORMATION

6.07

PRODUCT DESCRIPTION

ZINC CLAD III HS is a three-component, polyamide epoxy, zinc-rich coating. It has a low VOC level and contains 90.5% by weight of zinc dust pigment in its dried film.

- Meets Class B requirements for Slip Coefficient and Creep Resistance
- Provides cathodic protection
- Damaged film exhibits "self-healing" properties
- Fast Recoat Time
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Gray-Green, OAP Blue
Volume Solids:	70% ± 2%, ASTM D2697
Weight Solids:	90% ± 2%, mixed
VOC (EPA Method 24):	Unreduced: <340 g/L; 2.80 lb/gal mixed Reduced 5%: <360 g/L; 3.00 lb/gal
Zinc Dust Pigment Content in Dry Film:	ASTM D 521 90% Min ASTM D 6580 85% Min
Mix Ratio:	3 components, premeasured 3.25 gallons (12.3L) total

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	4.5 (113)	7.0 (175)
Dry mils (microns)	3.0 (75)	5.0 (125)
~Coverage sq ft/gal (m²/L)	224 (5.5)	370 (9.1)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1120 (27.5)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 35°F/1.7°C	@ 77°F/25°C 50% RH	@ 120°F/49°C
To touch:	45 minutes	30 minutes	10 minutes
To handle:	2 hours	1 hour	30 minutes
To recoat*:			
minimum:	4 hours	30 minutes	30 minutes
**maximum:	none	none	none
To cure:	10 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

*NOTE: Film must be free of solvent, hard and firm. When rubbed with the face of a coin or knife the film should polish but not flake or chip.

**Maximum Recoat: Unlimited. Must have a clean, dry surface for top-coating. "Loose" chalk or salts must be removed in accordance with good painting practice.

Paint temperature must be at least 40°F (4.5°C) minimum.

Pot Life:	6 hours	4 hours	2 hours
Sweat-in-Time:	1 hour	30 minutes	15 minutes

Shelf Life:	Part A*: 18 months, unopened Part B: 18 months, unopened Part F: 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)
--------------------	---

*B69LW100 (Part A) has a 12 month shelf life

PRODUCT CHARACTERISTICS (CONT'D)

Flash Point:	67°F (19°C), Closed Cup, mixed
Reducer/Clean Up:	
Below 80°F (27°C):	Reducer #58 or MEK, R6K10
Above 80°F (27°C):	Reducer #58 or R7K104

RECOMMENDED USES

For use over properly prepared blasted steel.

- Fabrication Shops
- Bridge and Highway Structures
- Stadiums and Sports Complexes
- Drilling Rigs
- Piping
- Refineries
- Barges and Ships
- Wind Towers - onshore and offshore
- Shop or Field Applications
- Not recommended for immersion service
- Approved with FIRETEX hydrocarbon coatings

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10/NACE 2

System Tested*:

- 1 ct. Zinc Clad III HS @ 5.0 mils (125 microns) dft
- 1 ct. Macropoxy 646 @ 5.0-10.0 mils (125-250 microns) dft
- 1 ct. Acrolon 218 HS @ 5.0 mils (125 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D4541	1976 psi
Corrosion Weathering	ASTM D5894, 27 cycles, 9072 hours	Rating 10 per ASTM D610 for rusting; Rating 10 per ASTM D714 for blistering
Dry Heat Resistance (zinc only)	ASTM D2485	400°F (204°C)
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 4000 hours	Rating 10 per ASTM D610 for rusting; Rating 10 per ASTM D714 for blistering
Pencil Hardness (zinc only)	ASTM D3363	2H
Salt Fog Resistance	ASTM B117, 15,000 hours	Rating 10 per ASTM D610 for rusting; Rating 10 per ASTM D714 for blistering
Slip Coefficient* (zinc only)	AISC Specifications for Structural Joints using ASTM A325 or ASTM A490 Bolts	Class B, 0.52
Slip Coefficient**	AISC Specification for Structural Joints using ASTM A325 or ASTM A490 Bolts	Passes Class B, 0.58

Meets SSPC Paint Spec 20 - 1ct. Zinc @ 5 mils (125 microns) dft
Complies with ISO 12944-5 C5I and C5M requirements.

Footnotes:

- *1 ct. Zinc Clad III HS @ 3.0-5.0 mils (75-125 microns) dft
- **1 ct. Steel Spec Epoxy Primer @ 4.0-6.0 mils (100-150 microns) dft

*Refer to Slip Certification document



Protective & Marine Coatings

ZINC CLAD® III HS ORGANIC ZINC-RICH EPOXY PRIMER

PART A
PART A
PART B
PART F

B69A100
B69LW100
B69V100
B69D11

GRAY-GREEN, BASE
OAP BLUE, BASE
HARDENER
ZINC DUST

PRODUCT INFORMATION

Revised: August 04, 2016

6.07

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct.	
		Mils	(Microns)
Steel, polyurethane topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1-2 cts.	Acrolon 218 HS	3.0-6.0	(75-150)
Steel, catalyzed epoxy topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1-2 cts.	Macropoxy 646	5.0-10.0	(125-250)
Steel, catalyzed epoxy topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1-2 cts.	Tile-Clad HS	2.5-4.0	(63-100)
Steel, catalyzed epoxy siloxane topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1-2 cts.	Polysiloxane XLE-80	3.0-7.0	(75-175)
or			
1-2 cts.	Polysiloxane XLE-80 HAPS Free	3.0-7.0	(75-175)
Steel, acrylic topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
2 cts.	Pro Industrial DTM Acrylic Coating	2.5-4.0	(63-100)
or			
1 ct.	Fast Clad HB Acrylic	5.0-8.0	(125-200)
Steel, water based epoxy topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
2 cts.	Waterbased Tile-Clad Epoxy	2.0-4.0	(50-100)
Steel, water-based urethane topcoat:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1 ct.	Waterbased Tile-Clad Epoxy	2.0-4.0	(50-100)
1-2 cts.	Hydrogloss	2.0-4.0	(50-100)
Steel, Class B Compliant System:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1 ct.	Steel Spec Epoxy Primer (red)	4.0-6.0	(100-150)
ISO 12944 C5M System:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1 ct.	Fast Clad Urethane	6.0-9.0	(150-225)
or			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1 ct.	Tower Guard Epoxy	5.0-11.5	(125-287.5)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
FIRETEX ONLY			
Steel Substrate being primed for FIRETEX M90 and M90/2			
1 ct.	Zinc Clad III HS	3.0-6.0	(75-150)

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel: SSPC-SP6/NACE 3, 2 mil (50 micron) profile

Galvanizing: SSPC-SP7

Weathered Zinc Rich Primer: Clean, dry, sound

Surface Preparation Standards

Condition of Surface	ISO 8501-1 BS7079:A1	SSPC	NACE
White Metal	Sa 3	SP 5	1
Near White Metal	Sa 2.5	SP 10	2
Commercial Blast	Sa 2	SP 6	3
Brush-Off Blast	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted C St 2	SP 2	-
Pitted & Rusted	D St 2	SP 2	-
Rusted	C St 3	SP 3	-
Power Tool Cleaning	Pitted & Rusted D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface)
40°F (4.5°C) minimum, 120°F (49°C) maximum (material)
Relative humidity: At least 5°F (2.8°C) above dew point
85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

3.25 gallons (12.3L) mixed:

Part A 1 gallon (3.78L)
Part B 1 gallon (3.78L)
Part F 73 lb (33 Kg) Zinc Dust

1 gallon (3.78L) mixed:

Part A 0.30 gallon (1.14L)
Part B 0.30 gallon (1.14L)
Part F 22 lb (10 Kg) Zinc Dust

Weight: 27.63 ± 0.2 lb/gal ; 3.31 Kg/L, mixed

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



Protective & Marine Coatings

ZINC CLAD® III HS ORGANIC ZINC-RICH EPOXY PRIMER

PART A
PART A
PART B
PART F

B69A100
B69LW100
B69V100
B69D11

GRAY-GREEN, BASE
OAP BLUE, BASE
HARDENER
ZINC DUST

Revised: August 04, 2016

APPLICATION BULLETIN

6.07

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance.

Iron & Steel (atmospheric service)

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Coat any bare steel the same day as it is cleaned or before flash rusting occurs.

When used on Ductile Iron Pipe, surface preparation shall be in accordance with NAPF 500-03-04 Abrasive Blast Cleaning of Ductile Iron Pipe with a minimum 1.0 mil surface profile.

Galvanized Steel

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned or before flash rusting occurs.

Weathered Zinc-Rich Primer

Remove zinc salts by either high pressure water washing and scrubbing with stiff bristle brush or sweep blast followed by water flush. Allow to dry.

Note: If blast cleaning with steel media is used, an appropriate amount of steel grit blast media may be incorporated into the work mix to render a dense, angular 1.5-3.0 mil (38-75 micron) surface profile, per Keane-Tator Surface Profile Comparator. A profile up to 4 mils (100 microns) is acceptable, however, coating must be applied to achieve a minimum of 3 mils (75 microns) dft. This method may result in improved adhesion and performance.

Surface Preparation Standards

Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal	Sa 3	Sa 3	SP 5	1
Near White Metal	Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast	Sa 2	Sa 2	SP 6	3
Brush-Off Blast	Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	C St 2	C St 2	SP 2	-
Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	C St 3	C St 3	SP 3	-
Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature: 35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface)
40°F (4.5°C) minimum, 120°F (49°C) maximum (material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up

Below 80°FReducer #58 or MEK, R6K10
Above 80°FReducer #58 or R7K104

Airless Spray

(use Teflon packings and continuous agitation)

Pressure.....2000 - 2300 psi
Hose.....3/8" ID
Tip019"
Filternone
Reduction.....As needed up to 5% by volume

Conventional Spray

(continuous agitation required)

GunBinks 95
Fluid Nozzle68
Air Nozzle.....68P
Atomization Pressure.....50 psi
Fluid Pressure.....10 - 20 psi
Reduction.....As needed up to 5% by volume

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

Brush

Brush.....Small areas only; natural bristle
Reduction.....Not recommended

If specific application equipment is not listed above, equivalent equipment may be substituted.



Protective & Marine Coatings

ZINC CLAD® III HS ORGANIC ZINC-RICH EPOXY PRIMER

PART A
PART A
PART B
PART F

B69A100
B69LW100
B69V100
B69D11

GRAY-GREEN, BASE
OAP BLUE, BASE
HARDENER
ZINC DUST

Revised: August 04, 2016

APPLICATION BULLETIN

6.07

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Zinc Clad III HS comes in 3 premeasured containers which when mixed provides 3.25 gallons (12.3L) of ready-to-apply material.

Mixing Instructions:

Mix contents of component A and B thoroughly with low speed power agitator. Make certain no pigment remains on the bottom of the can. Then combine 1 part by volume of Part A with 1 part by volume of Part B, then add Part F (73 lb zinc dust). Thoroughly agitate the mixture with power agitation. After mixing, pour through a 30-60 mesh screen. Allow the material to sweat-in as indicated. Re-stir before using.

If reducer solvent is used, add only after components have been thoroughly mixed, after sweat-in.

Continuous agitation of mixture during application is required, otherwise zinc dust will quickly settle out.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	4.5 (113)	7.0 (175)
Dry mils (microns)	3.0 (75)	5.0 (125)
~Coverage sq ft/gal (m ² /L)	224 (5.5)	370 (9.1)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	1120 (27.5)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 35°F/1.7°C	@ 77°F/25°C 50% RH	@ 120°F/49°C
To touch:	45 minutes	30 minutes	10 minutes
To handle:	2 hours	1 hour	30 minutes
To recoat*:			
minimum:	4 hours	30 minutes	30 minutes
**maximum:	none	none	none
To cure:	10 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

*NOTE: Film must be free of solvent, hard and firm. When rubbed with the face of a coin or knife the film should polish but not flake or chip.

**Maximum Recoat: Unlimited. Must have a clean, dry surface for top-coating. "Loose" chalk or salts must be removed in accordance with good painting practice.

Paint temperature must be at least 40°F (4.5°C) minimum.

Pot Life:	6 hours	4 hours	2 hours
Sweat-in-Time:	1 hour	30 minutes	15 minutes

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with MEK, R6K10. Clean tools immediately after use with MEK, R6K10. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and performance.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with MEK, R6K10.

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

SSPC-SP11 surface preparation is acceptable for small areas.

Higher dry film thickness may be acceptable under certain conditions. Contact your Sherwin-Williams representative.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.