From: Daly, Keith
To: Peppers, Nicki;
cc: Degenhart, Mark; Green, Frank;
Subject: FW: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold
Date: Monday, March 07, 2011 2:30:04 PM
Attachments: FinalCoatingWSDOTGraydatasheet.pdf
IntermediateCoatingdatasheet.pdf
Primerdatasheet.pdf
PrepandPaintingProcedures.pdf
TransmittalSheet.pdf

Nicki,

Attached are the painting submittals for air manifold from American Construction. Please process through HQ for approval.

Mark,

Will you please make contact with Vernon to make sure he coordinates this work thru you and that he knows the materials need to be approved before he begins work. I told him this once but will you just touch bases with him. You may want to touch bases with Kyle Kaufman also so he is aware of this work.

Thanks,

Keith Daly
Budget Manager

Columbia River Crossing Project | mailto:dalyk@columbiarivercrossing.org
700 Washington St. Suite 300, Vancouver, WA 98660
office: 360.816.8870 | Office: 503.256.2726 Ext. 8870
Fax: 360.737.0294

From: Vernon Uy [mailto:vernonu@americanconstco.com]
Sent: Monday, March 07, 2011 2:12 PM
To: Daly, Keith
Subject: RE: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold

Hi Keith.

Attached you'll find the submittals for the painting work on the Air Manifold. Hard copy is in the mail.

Thanks.

Vernon Uy
American Construction Company, Inc.
(425) 870-3217

From: "Daly, Keith" <dalyk@columbiarivercrossing.com>
Sent: Thursday, March 03, 2011 4:10 PM
To: vernonu@americanconstco.com
Subject: RE: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold

Vernon,

As stated in serial letter #24 the manifold for bubble curtain shall be painted Washington Gray. Please refer to Sections 6-07.3(9)B, 9-08.1(8), and 9-08.3 of the Standard Specifications.

Please submit a Request to Sublet Work (Form #421-012) for Coatings Unlimited Inc. which must be approved prior to starting this work. I have attached a copy of this form for your use. If you have any questions please let me know.

Thanks,

Keith Daly
Budget Manager

Columbia River Crossing Project ? mailto:dalyk@columbiarivercrossing.org
700 Washington St. Suite 300, Vancouver, WA 98660
office: 360.816.8870 ? Office: 503.256.2726 Ext. 8870
Fax: 360.737.0294

From: Vernon Uy [mailto:vernonu@americanconstco.com]
Sent: Thursday, March 03, 2011 2:51 PM
To: Daly, Keith
Subject: RE: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold

Hi Keith.

Please provide information on the color. We talked about "WSDOT green" for a color. Our painting sub states there are different shades/tones of WSDOT green. Can you provide me with a color number?

Attached is the RAM Form for our painting sub, Coatings Unlimited Inc. of Kent, WA. Coatings Unlimited Inc. will sandblast and paint per WSDOT Specification 6-07.3(9)

Thanks.

Vernon Uy
American Construction Company, Inc.

(425) 870-3217

From: "Daly, Keith" <dalyk@columbiarivercrossing.com>
Sent: Wednesday, March 02, 2011 10:12 AM
To: vernonu@americanconstco.com
Subject: RE: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold

Vernon,

You are correct Section 6-07.3(9) Painting New Steel Structures in the Standard Specifications is the section we discussed yesterday. Please submit the required documents in accordance with this section. Prior to performing any painting all required documentation will need to be approved. Please remember to coordinate the painting work with Mark Degenhart so any required inspection can be done.

Thanks,

Keith Daly
Budget Manager

Columbia River Crossing Project ? mailto:dalyk@columbiarivercrossing.org
700 Washington St. Suite 300, Vancouver, WA 98660
office: 360.816.8870 ? Office: 503.256.2726 Ext. 8870
Fax: 360.737.0294

From: Vernon Uy [mailto:vernonu@americanconstco.com]
Sent: Wednesday, March 02, 2011 9:49 AM
To: Daly, Keith
Subject: fw: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold

Hi Keith.

Based on our phone conversation yesterday, and after review of the WSDOT specs (Painting Section 6-07), I think the painting requirements detailed on Section 6-07.3(9) Painting New Steel Structures will suffice. These are on pages 6-156 thru 6-158 of the specs.

Please concur. Once I receive an agreement, I will turn in the required submittals.

Thanks.

Vernon Uy
American Construction Company, Inc.
(425) 870-3217

From: "Vernon Uy" <vernonu@americanconstco.com>
Sent: Friday, February 25, 2011 12:09 PM
To: "Keith Daly - WSDOT" <dalyk@columbiarivercrossing.org>
Subject: Contract 8078 - RFI 005: Painting specifications for the Bubble Curtain Manifold

Hi Keith.

Now is the time to look into the painting requirements on the Bubble Curtain Manifold. Sheet ND4, Note 1 states to "paint steel components per standard specifications."

Questions:

- Please provide details on how you want the Bubble Curtain Manifold painted.
- What color? Coating thickness?
- What is the pre-painting treatment (surface cleaning/prep) requirements?
- We're only painting the manifold, correct?

Let me know. Thanks.

Vernon Uy
American Construction Company, Inc.
(425) 870-3217

*** eSafe scanned this email for malicious content ***
*** IMPORTANT: Do not open attachments from unrecognized senders ***

COATINGS UNLIMITED INC.
18420 68TH AVE. S., #110
KENT, WA. 98032-1093
PH: 425-251-3268 FAX: 425-251-3269

PAINT PROCEDURE

AIR SUPPLY MANIFOLD

CUSTOMER: AMERICAN CONSTRUCTION

SPECIFICATION: Prepare and paint per WSDOT Standard Specification M41-10 6-07.3(9) Painting new steel structures.

The following steps for coating the referenced parts will be in accordance with American Construction Purchase Order# TBA.

1. All Quality Control hold points and inspections are performed per specification and CUI shop QC Procedures and meet WSDOT standards.

2. All surfaces to be coated are cleaned as needed per SSPC-SP1, Solvent Cleaning prior to other surface preparation methods.

3. Specified surfaces to be coated are abrasive blasted to standard SSPC-SP10, Near White Metal Cleaning using Amesteel #40 steel grit abrasive.
   a. Open air blasting in the CUI Blast Room, pressure at the nozzle is 98 to 103 PSI using a #6 Venturi type nozzle which will provide specified standard blast and a sharp angular anchor profile at the required depth.
   b. Representative profile tests are taken after the blast passes visual inspection. CUI method is Testex Tape and Mitutoyo "snap gauge" micrometer.
   c. All surfaces not to be coated are masked and protected per the Drawings.
   d. "Lag time" (time between blasting and coating application) shall not exceed specified limit, and if no limit is specified, before any rusting or other contamination of the blasted surfaces occurs. Usual standard lag time is 8 hours before re-blasting is required, or sooner, given same caveats. In the CUI facility, air contaminants are not likely to impact the blasted surfaces, and unless conditions are expected to approach surface temperature < 5°F over measured dew point temperature, the blast condition will remain acceptable indefinitely.
   e. If CUI intends to use the airless spray method, a Graco air powered Bulldog or equivalent pump will be employed, generating a minimum of 3000 PSI, 3/8" pressure line, Graco Silver gun with a .019" tip. This method conforms to the attached International product information document.
   f. If CUI intends to use conventional airspray method, a Binx or Devilbis 2 gallon pressure pot will be employed using a Binx or Devilbis gun with a .070" or larger fluid tip and cap that provides best atomization at lowest

pressure to avoid overspray problems. This method conforms to the attached International product information document.

g. A Nordson wet film thickness gage will be used by the painter to ensure proper wet thickness which conforms to solids calculations so that proper dry thickness is provided.

INSPECTION AND TESTING Visual inspection for coating defects and Dry film thickness (DFT) testing per SSPC PA2 is performed on all coated surfaces.

a. CUI shop uses both Type I and type II DFT gauges. The gauge is properly calibrated. The gauge to be used on this project is a DeFelsko Positector 6000 FN1 Electronic Coating Thickness Gage (reference Type II in the Standard.). Re-calibration date for this instrument is 9/20/2011.
b. Any coating defects found during final inspection are corrected in accordance with coating manufacturer's printed instructions.
c. After coating has sufficiently cured for testing, the repaired areas will be re-inspected.
d. Conformance Certificates are generated, signed by the QC Inspector and sent with the work-piece.

Todd Kulesza
Coatings Unlimited Inc. QC/ NACE 2

Sct 9-08.1(2)G
4 PALLS

Industrial & Marine Coatings

5.07 COROTHANE® I IRONOX® B

REDDISH GRAY B65A11

$31-

PRODUCT INFORMATION

Revised 1/09

PRODUCT DESCRIPTION

COROTHANE I IRONOX B is a single component, VOC compliant, moisture curing urethane intermediate coat with micaceous iron oxide designed for low temperature applications, providing chemical and abrasion resistance.

- Low temperature application - down to 20°F
- Outstanding adhesion to most surfaces
- Outstanding abrasion and chemical resistance
- Suitable for use in USDA inspected facilities

RECOMMENDED USES

- Intermediate coat for lead overcoating system
- Ideal for stripe coating over primed surfaces.
- Superior coverage on edges and bridging over cracks due to micaceous iron oxide
- Must be topcoated for exterior use
- Conforms to AWWA D102-03, OCS #2
- Acceptable for use as a primer or intermediate coating
- Meets requirements of SSPC Paint Spec No. 41 for zinc rio moisture cure urethane primer on intermediate.

PRODUCT CHARACTERISTICS

Finish: Low Gloss

Color: Reddish Gray

Volume Solids: 64% ± 2%, may vary by color

Weight Solids: 81.4% ± 2%, may vary by color

VOC (EPA Method 24): <340 g/L; 2.8 lb/gal

Recommended Spreading Rate per coat:

Wet mils:	5.0 - 8.0
Dry mils:	3.0 - 5.0
Coverage:	204 - 340 sq ft/gal approximate

Drying Schedule @ 5.0 mils wet @ 50% RH:

	@40°F	@ 75°F	@100°F
To touch:	2 hours	40 minutes	20 minutes
To handle:	8 hours	6 hours	2 hours
To recoat:			
minimum:	8 hours	6 hours	2 hours
maximum:	12 months	12 months	12 months
To cure:	4 days	3 days	1 day

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

Shelf Life: 12 months, unopened
Store indoors at 40°F to 100°F

Flash Point: 110°F, PMCC

Reducer/Clean Up: Reducer #15, R7K15 or

@ 5Mil / 25% loss = 155SF/GAL
.2 x 1.25 = .25/SF

PERFORMANCE CHARACTERISTICS

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP6
1 ct. Corothane I GalvaPac Zinc Primer @ 3.0 mils dft
1 ct. Corothane I IronOx B @ 3.0 mils dft
1 ct. Corothane I IronOx A @ 3.0 mils dft

Abrasion Resistance:
Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result: 21 mg loss

Adhesion:
Method: ASTM D4541
Result: 1000 psi

Direct Impact Resistance:
Method: ASTM D2794
Result: 80 in. lbs.

Dry Heat Resistance:
Method: ASTM D2485
Result: 300°F

Flexibility:
Method: ASTM D522, 180° bend, 7/16 " mandrel
Result: Passes

Moisture Condensation Resistance:
Method: ASTM D4585, 100°F, 300 hours
Result: Passes

Pencil Hardness:
Method: ASTM D3363
Result: 2H

Salt Fog Resistance:
Method: ASTM B117, 2500 hours
Result: Passes

Wet Heat Resistance:
Method: Non-immersion

continued on back

SHERWIN WILLIAMS

Industrial & Marine Coatings

5.07 COROTHANE® I IRONOX® B

REDDISH GRAY B65A11

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

Steel:
1 ct. Corothane I GalvaPac Zinc Primer @ 3.0 - 4.0 mils dft
1 ct. Corothane I IronOx B @ 3.0 - 5.0 mils dft
1 ct. Corothane I IronOx A @ 2.5 - 3.5 mils dft

Steel:
1 ct. Corothane I PrePrime @ 1.5 - 2.0 mils dft
1 ct. Corothane I IronOx B @ 3.0 - 5.0 mils dft
1 ct. Corothane I IronOx A @ 2.5 - 3.5 mils dft

Concrete, smooth:
1 ct. Corothane I PrePrime @ 1.5 - 2.0 mils dft
1 ct. Corothane I IronOx B @ 3.0 - 5.0 mils dft
1 ct. Corothane I IronOx A @ 2.5 - 3.5 mils dft

Concrete, rough:
1 ct. Kem Cati-Coat HS Epoxy Filler/Sealer @ 10.0 - 30.0 mils dft/ct, as required to fill voids and provide a continuous substrate.
1 ct. Corothane I IronOx B @ 3.0 - 5.0 mils dft
1 ct. Corothane I Aliphatic Finish Coat @ 2.0 - 3.0 mils dft

Previously painted surfaces:
Spot prime all bare steel with 1 coat Corothane I GalvaPac Zinc Rich Primer
1 ct. Corothane I IronOx B @ 3.0 - 5.0 mils dft
1 ct. Corothane I IronOx A @ 2.5 - 3.5 mils dft

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

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
* Concrete:	SSPC-SP13/NACE 6
Previously Painted:	SSPC-SP2 or SP3, or ICRI 03732, CSP 1-3

* Primer required

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:	
air and surface:	20°F minimum, 100°F maximum
material:	45°F minimum Do not apply over surface ice
Relative humidity:	Can be applied at relative humidities up to 99%.

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 and 5 gallon containers
Weight per gallon:	13.8 ± 0.2 lb

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.

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.

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.

SHERWIN WILLIAMS.

Industrial & Marine Coatings

5.07A COROTHANE® I IRONOX® B

REDDISH GRAY B65A11

APPLICATION BULLETIN

Revised 1/09

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.

Iron & Steel

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). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Poured Concrete

New

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3. Surface must be clean, dry, sound, and offer sufficient profile to achieve adequate adhesion. Minimum substrate cure is 28 days at 75°F. Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 8.0 and 10.0. Allow to dry thoroughly prior to coating.

Old

Surface preparation is done in much the same manner as new concrete; however, if the concrete is contaminated with oils, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release agents, hardeners, etc. must be removed by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. If surface deterioration presents an unacceptably rough surface, Kem Cati-Coat HS Epoxy Filler/Sealer is recommended to patch and resurface damaged concrete.

Fill all cracks, voids and bugholes with ArmorSeal Crack Filler.

Always follow the standard methods listed below:

ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete
SSPC-SP 13/Nace 6 Surface Preparation of Concrete
ICRI 03732 Concrete Surface Preparation

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, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface

APPLICATION CONDITIONS

Temperature:	
air and surface:	20°F minimum, 100°F maximum
material:	45°F minimum Do not apply over surface ice
Relative humidity:	Can be applied at relative humidities up to 99%.

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 .....Reducer #15, R7K15 or R7K111 (VOC exempt)

Airless Spray

Pump	30:1
Pressure	1800 - 2000 psi
Hose	1/4" ID
Tip	.013" - .017"
Filter	60 mesh
Reduction	As needed up to 10% by volume

Conventional Spray

Unit	Graco	Binks
Gun	900	95
Fluid Nozzle	070	66/65
Air Nozzle	947	66PR
Atomization Pressure	60-70 psi	60-70 psi
Fluid Pressure	15-20 psi	15-20 psi
Reduction	As needed up to 10% by volume	

Brush

Brush	Natural bristle
Reduction	As needed up to 10% by volume

Roller

Cover	1/4" natural or synthetic with phenolic core
Reduction	As needed up to 10% by volume

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

continued on back

SHERWIN WILLIAMS.

Industrial & Marine Coatings

5.07A
COROTHANE® I IRONOX® B

REDDISH GRAY B65A11

APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Stir paint thoroughly prior to use with a power agitator. Filter slowly through a 55 mesh screen.

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

Recommended Spreading Rate per coat:

Wet mils:	5.0 - 8.0
Dry mils:	3.0 - 5.0
Coverage:	204 - 340 sq ft/gal approximate

Drying Schedule @ 5.0 mils wet @ 50% RH:

	@40°F	@ 75°F	@100°F
To touch:	2 hours	40 minutes	20 minutes
To handle:	8 hours	6 hours	2 hours
To recoat:			
minimum:	8 hours	6 hours	2 hours
maximum:	12 months	12 months	12 months
To cure:	4 days	3 days	1 day

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 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 adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #15, R7K15.

Pour a small amount of Reducer #15, R7K15 over the top of the paint in the can to prevent skinning or gelling.

Place a temporary cover over the pail to keep excessive moisture, condensation, fog, or rain from contaminating the coating.

It is recommended that partially used cans not be sealed/closed for use at a later date.

Corothane KAAccelerator is acceptable for use. See data page 5.98 for details.

Must be topcoated for exterior use.

Refer to Product Information sheet for additional performance

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #15, R7K15. Clean tools immediately after use with Reducer #15, R7K15. Follow manufacturer's safety recommendations when using any solvent.

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.

DISCLAIMER

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WARRANTY

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Marine Construction *Dredging* *Pile Driving*
1501 Taylor Way • Tacoma, Washington 98421
PHONES: Tacoma (253) 254-0118,
Seattle (206) 623-0114,
Fax (253) 254-0155

CONTRACTORS LIC NO. 223-01-AM-ER-IC*372 NO.

AMERICAN CONSTRUCTION COMPANY

DATE March 7, 2011

JOB #: MC 02-11

TITLE: Columbia River Bridge Temporary Pile Test Program (#8078)

TO: Columbia River Crossing Project Office
700 Washington Street, Suite 300
Vancouver, WA 98660

Attn: Frank Green, P.E.

THE FOLLOWING ITEMS ARE BEING SENT:

Herewith	X
Under Separate Cover	
Direct	

QUANTITY	DESCRIPTION
	Painting Submittals for painting of Air Manifold:
1 EA	Prep and painting procedures (from Coatings Unlimited, Inc)
1 EA	Data Sheet for Zinc Clad II Ethyl Silicate (primer coating)
1 EA	Data Sheet for Corothane I Ironox B (intermediate coating)
1 EA	Data Sheet for Corothane I HS (final coating; WSDOT Grey)

These items are being sent:

X	Per your request
X	Please keep us advised of action taken
X	For you to process
X	For your inspection and approval
X	For your general information and file
X	For your approval or corrections

REMARKS:

Please contact us promptly if there is a problem or question

COPY TO:

AMERICAN CONSTRUCTION COMPANY, INC.

BY: _____
Vernon Uy

SCT 9-08, 1(2)c (4 pages)

A-11-99

Industrial & Marine Coatings

6.02

ZINC CLAD® II ETHYL SILICATE

INORGANIC ZINC-RICH COATING

PART E B69V3 BINDER
PART F B69D11 ZINC DUST

PRODUCT INFORMATION

Revised 08/08

PRODUCT DESCRIPTION

ZINC CLAD II ETHYL SILICATE is a solvent-based two-package, inorganic ethyl silicate, zinc-rich coating.

- Meets Class B requirements for Slip Coefficient and Creep Resistance, .56
- Meets AASHTO M-300 specification
- 85% zinc content in dry film
- Coating self-heals to resume protection if damaged
- Provides cathodic/sacrificial protection by the same mechanism as galvanizing. Also protects steel by forming an inorganic moisture and solvent barrier

RECOMMENDED USES

For use over properly prepared blasted steel.

- As a one-coat maintenance coating or as a permanent primer for severely corrosive environments (pH range 5-9)
- Economical replacement for galvanizing with similar performance
- Ideal for application at low temperatures or service at high temperatures and/or humidity conditions
- Water intake and discharge lines (non-potable)
- Where abrasion resistance and hardness is required
- Bridges, refineries, drilling rigs
- Shop or field application
- Not recommended for severe acid or alkali exposure

PRODUCT CHARACTERISTICS

Finish: Flat

Color: Gray-green

Volume Solids: 62% ± 2%, ASTM D2697, mixed

Weight Solids: 82% ± 2 %, mixed

VOC (calculated): mixed
Unreduced: <500 g/L; 4.17 lb/gal
Reduced 10%: <500 g/L; 4.17 lb/gal

Zinc Content in Dry Film: 85% by weight

Mix Ratio: 2 components; premeasured
5 gallons mix

Recommended Spreading Rate per coat:
Wet mils: 3.5 - 6.5
Dry mils: 2.0 - 4.0
Coverage: 248 - 496 sq ft/gal approximate
Note: Brush application is for small areas only.
Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Drying Schedule @ 5.0 mils wet @ 50% RH

	@55°F	@77°F	@100°F
Rain resistant	1 hours	20-30 minutes	15 minutes
To touch:	30 minutes	15 minutes	5 minutes
To handle:	3 hours	1-2 hours	20 minutes
To recoat:	48 hours	18 hours	18 hours
To cure:	7 days	7 days	7 days
Immersion service:	14 days	14 days	14 days

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

Pot Life: 18 hours 8 hours 6 hours
Note: High humidity will shorten the pot life.

Sweat-in-Time: None required

Shelf Life: Part E - 9 months, unopened
Part F - 24 months, unopened
Store indoors at 40°F to 100°F

Flash Point: 55°F, PMCC, mixed

Reducer/Clean Up: Below 80°F - Xylene, R2K4
Above 80°F - Reducer #58, R7K58

PERFORMANCE CHARACTERISTICS

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
1 ct. Zinc Clad II @ 3.0 mils dft

Abrasion Resistance:
Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result: 326 mg loss

Adhesion:
Method: ASTM D4541
Result: 6.77 MPa = 982 lb psi

Direct Impact Resistance:
Method: ASTM D2794
Result: 60 in. lbs.

Dry Heat Resistance:
Method: ASTM D2485
Result: 750°F

Immersion Resistance (untopcoated):
Method: 1 year
Results: Acceptable for: crude oil, fresh and demineralized water, gasoline

Moisture Condensation Resistance:
Method: ASTM D4585, 100°F, 2000 hours
Result: No Failure

Pencil Hardness:
Method: ASTM D3363
Result: 3H

Salt Fog Resistance:
Method: ASTM B117, 2000 hours
Result: No Failure

Wet Heat Resistance:
Method: Non-immersion
Result: 115°F

Slip Coefficient, zinc only:
Method: AISC Specification for Structural Joints Using ASTM A325 or ASTM A490 Bolts
Result: Class B, 0.56

Provides performance comparable to products formulated to Federal Specifications: Mil-P-38336, Mil-P-46105, and SSPC Paint 20.

continued on back

Industrial & Marine Coatings

6.02

ZINC CLAD® II ETHYL SILICATE

INORGANIC ZINC-RICH COATING

PART E B69V3 BINDER
PART F B69D11 ZINC DUST

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

Steel, Zinc Primer/Finish, Immersion or atmospheric:
1 ct. Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft

Steel, Acrylic Topcoat, atmospheric:
1 ct. Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft
2 cts. DTM Acrylic Coating @ 2.5 - 4.0 mils dft/ct

Steel, Coal Tar Epoxy Topcoat, atmospheric:
1 ct. Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft
1 ct. Hi-Mil Sher-Tar Epoxy @ 16.0 - 20.0 mils dft

Steel, Epoxy Topcoat, atmospheric:
1 ct. Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft
1-2 cts. Macropoxy HS @ 3.0 - 6.0 mils dft/ct

Steel, Epoxy Topcoat, atmospheric:
1 ct. Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft
2 cts. Tile-Clad HS Epoxy @ 3.0 - 4.0 mils dft/ct

Steel, Urethane Topcoat, atmospheric:
1 ct. Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft
1 ct. Macropoxy HS @ 3.0 - 6.0 mils dft/ct
1 ct. Sherthane 2K Urethane @ 2.0 - 4.0 mils dft

NOTE: 1 ct. of DTM Wash Primer can be used as an intermediate coat under recommended topcoats to prevent pinholing.

Steel, Class B Compliant System
1 ct Zinc Clad II Ethyl Silicate @ 2.0 - 4.0 mils dft
1 ct Steel Spec Epoxy Primer (red) @ 4.0-6.0 mils dft

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

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	
Atmospheric:	SSPC-SP6/ NACE 3, 2 mil profile
Immersion:	SSPC-SP10/NACE 2, 2 mil profile

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:	
air and surface:	0°F minimum, 120°F maximum
material:	40°F minimum
	At least 5°F above dew point
Relative humidity:	40% - 90% maximum
	Water misting may be required at humidities below 50%

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	5 gallons mixed
Part E:	3.75 gallons in a 5 gallon can
Part F:	73 lb zinc dust
Weight per gallon:	20.9 ± 0.2 lb, mixed

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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Industrial & Marine Coatings

6.02A

ZINC CLAD® II ETHYL SILICATE

INORGANIC ZINC-RICH COATING

PART E B69V3 BINDER
PART F B69D11 ZINC DUST

APPLICATION BULLETIN

Revised 08/08

SURFACE PREPARATION

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance. Surface must be dry, free from oil, dirt, dust, mill scale, or other contaminants to ensure adequate adhesion.

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). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Iron & Steel (immersion service)
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is 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). Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

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 - 2.0 mil surface profile. This method may result in improved adhesion and performance.

APPLICATION CONDITIONS

Temperature:	
air and surface:	0°F minimum, 120°F maximum
material:	40°F minimum
	At least 5°F above dew point
Relative humidity:	40% - 90% maximum
	Water misting may be required at humidities below 50%

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°F .....Xylene, R2K4
Above 80°F .....Reducer #58, R7K58

Airless Spray
(use Teflon packings and continuous agitation)
Pressure.....1800 - 2000 psi
Hose.....3/8" ID
Tip.....017" - .021"
Reduction.....As needed up to 10% by volume

Conventional Spray
(continuous agitation required)
Gun.....Binks 95
Fluid Nozzle.....66
Air Nozzle.....63PB
Atomization Pressure.....30 - 40 psi
Fluid Pressure.....10 - 20 psi
Reduction.....As needed up to 10% 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 .....For touch-up only

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

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Industrial & Marine Coatings

6.02A

ZINC CLAD® II ETHYL SILICATE

INORGANIC ZINC-RICH COATING

PART E B69V3 BINDER
PART F B69D11 ZINC DUST

APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.
Zinc Clad II comes in 2 premeasured containers which when mixed provides 5 gallons of read-to-apply material.

Mixing Instructions: Thoroughly agitate Binder Part E. Using continuous air driven agitation, slowly mix all of Zinc Dust Part F into all of Binder Part E until mixture is completely uniform. After mixing, pour mixture through 30-60 mesh screen. Mixed material must be used within 8 hours. Do not mix previously mixed material with new.
If reducer solvent is used, add only after both components have been thoroughly mixed.
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:

Wet mils:	3.5 - 8.5
Dry mils:	2.0 - 4.0
Coverage:	248 - 496 sq ft/gal approximate

Note: Brush application is for small areas only.

Drying Schedule @ 5.0 mils wet @ 50% RH

	@ 55°F	@ 77°F	@ 100°F
Rain resistant	1 hours	20-30 minutes	15 minutes
To touch:	30 minutes	15 minutes	5 minutes
To handle:	3 hours	1-2 hours	20 minutes
To recoat:	48 hours	18 hours	18 hours
To cure:	7 days	7 days	7 days
Immersion service:	14 days	14 days	14 days

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

Pot Life:	18 hours	8 hours	6 hours

Note: High humidity will shorten the pot life.

Sweat-in-Time: None required

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

PERFORMANCE TIPS

Topcoating: Note minimum cure times at normal conditions before topcoating. Longer drying periods are required if primer cannot be water mist sprayed when humidity is low. Water misting may be required at humidities below 50%.
Occasionally topcoats will pinhole or delaminate from zinc-rich coatings. This is usually due to poor ambient conditions or faulty application of topcoats. This can be minimized by:

- Providing adequate ventilation and suitable application and substrate temperature.
- Avoid dry spray of topcoat.
- If pinholing develops, apply a mist coat of the topcoat, reduced up to 50%. Allow 10 minutes flash off and follow with a full coat.
- Applying a wet full coat, but at minimum film build, prior to applying a complete full coat.

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 Xylene, R2K4.

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.

Application above recommended film thickness may result in mud cracking.

Not recommended for severe acid or alkali exposures.

Oil base, alkyd, epoxy ester, and silicone alkyd topcoats are not recommended.

Polyurethane topcoats require a tie coat of catalyzed epoxy.

Topcoats may be applied once 50 MEK double rubs are achieved. No zinc or only slight traces should be visible. Coin hardness test can also be used.

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

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. Follow manufacturer's safety recommendations when using any solvent.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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4 PAGES

C-11-99

Industrial & Marine Coatings

5.12 COROTHANE® I HS ALIPHATIC FINISH COAT

B65-50 SERIES

$55

PRODUCT INFORMATION

Revised 11/06

PRODUCT DESCRIPTION

COROTHANE I HS is a single component, VOC compliant, moisture curing urethane designed for low temperature or high humidity applications while providing UV resistance and chemical resistance equivalent to two part urethane coatings.

- Low temperature application - down to 20°F
- Superior resistance to yellowing, chalking, or degradation by sunlight
- Superior adhesion to most prepared surfaces
- Superior abrasion resistance
- Outstanding chemical resistance
- VOC compliant
- One component

RECOMMENDED USES

- Color coat where maximum color and gloss retention are required
- Suitable for use in the following industries:
  - Marine
  - Industrial
  - Bridge and Highway
  - Petro-Chemical
  - Pulp and Paper
  - Rail
  - Water and Waste Water
- Suitable for use in USDA inspected facilities.
- Conforms to AWWA D102-03 OCS #2

PRODUCT CHARACTERISTICS

Finish: Gloss

Color: Wide range of colors available

Volume Solids: 61% ± 1%, may vary by color

Weight Solids: 77% ± 2%

VOC (EPA Method 24): Unreduced: <340 g/L; 2.8 lb/gal

Recommended Spreading Rate per coat:

Wet mils:	3.5 - 5.0
Dry mils:	2.0 - 3.0
Coverage:	326 - 489 sq ft/gal approximate

Drying Schedule @ 4.0 mils wet @ 50% RH:

	@ 40°F	@ 77°F	@ 100°F
To touch:	4 hours	2 hours	45 minutes
To recoat:			
minimum:	24 hours	12 hours	6 hours
maximum:	14 days	14 days	14 days
To cure:	7 days	3 days	3 days

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

Shelf Life: 12 months, unopened. Store indoors at 40°F to 100°F. (Tinted colors must be used within 7 days after tinting)

Flash Point: 101°F, Seta Flash

Reducer/Clean Up: Reducer #15, R7K15, R7K100, or R7K111 (VOC exempt)

PERFORMANCE CHARACTERISTICS

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP6
1 ct: Corothane I MIO-Aluminum @ 3.0 mils dft
1 ct: Corothane I HS @ 3.0 mils dft

Abrasion Resistance:
Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result: 80 mg loss

Adhesion:
Method: ASTM D4541
Result: 1296 psi

Corrosion Weathering:
Method: ASTM D5894, 12 cycles, 4032 hours
Result: Rating 10 per ASTM D610 for rusting
Rating 10 per ASTM D714 for blistering

Direct Impact, topcoat only:
Method: ASTM D2794
Result: 70 in lb

Flexibility, topcoat only:
Method: ASTM D522, 180° bend, 1/8" mandrel
Result: Passes

Humidity:
Method: ASTM-D4585, 1000 hours
Result: Rating 10 per ASTM D610 for rusting
Rating 10 per ASTM D714 for blistering

Pencil Hardness:
Method: ASTM D3363
Result: HB

Salt Fog Resistance:
Method: ASTM B117, 1000 hours
Result: Rating 10 per ASTM D610 for rusting
Rating 10 per ASTM D714 for blistering

Thermal Cycling:
Method: ASTM D2246, 15 cycles
Result: Passes, no cracking, checking, or blistering; no loss of adhesion; 100% gloss retention

Meets requirements of SSPC Paint 38, Level II.

@ 3Hr/28% loss* 25m 35°
.22 x 1.25 = .27/SF

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Industrial & Marine Coatings

5.12

COROTHANE® I HS

ALIPHATIC FINISH COAT

B65-50 SERIES

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

Steel:
1 ct. Corothane I MIO-Aluminum @ 2.0 - 3.0 mils dft
1 ct. Corothane I Ironox B @ 3.0 - 5.0 mils dft
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft

Steel:
1 ct. Corothane I MIO-Aluminum @ 2.0 - 3.0 mils dft
1-2 cts. Corothane I HS @ 2.0 - 3.0 mils dft/ct

Steel:
1 ct. Corothane I GalvaPac Zinc Primer @ 3.0 - 4.0 mils dft
1 ct. Corothane I Ironox B @ 3.0 - 5.0 mils dft
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft

Steel:
1 ct. Corothane I PrePrime @ 1.0 - 1.5 mils dft
1 ct. Corothane I MIO-Aluminum @ 2.0 - 3.0 mils dft
1 ct. Corothane I Ironox B @ 3.0 - 5.0 mils dft
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft

Steel (Epoxy Primer):
1 ct Dura-Plate MT @ 6.0 - 8.0 mils dft
1-2 cts Corothane I HS Coat @ 2.0 - 3.0 dft/ct

Concrete, smooth:
1 ct. Corothane I PrePrime @ 1.0 - 1.5 mils dft
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft

Concrete, rough:
On deeply profiled or damaged concrete floor:
1 ct. Kem Cati-Coat HS Epoxy Filler/Sealer @ 10.0 - 20.0 mils dft/ct, as required to fill voids and provide a continuous substrate.
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft

Previously Painted Surfaces:
Spot prime bare steel with 1 coat of Corothane I GalvaPac Zinc Primer
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft
or
1 ct. Corothane I Ironox B @ 3.0 - 5.0 mils dft
1 ct. Corothane I HS @ 2.0 - 3.0 mils dft
(Check compatibility)

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

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
* Concrete & Masonry:	SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3
Previously Painted	SSPC-SP2 or SP3

* Primer required

TINTING

Tint B65W51 and B65T54 only with 844 colorants, 100% tint strength. Must be used within 7 days after tinting.

APPLICATION CONDITIONS

Temperature:	
air and surface:	20°F minimum, 100°F maximum
material:	45°F minimum Do not apply over surface ice
Relative humidity:	Can be applied at relative humidities up to 99%.

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 and 5 gallon containers
Weight per gallon:	11.79 ± 0.2 lb, may vary by color.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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SHERWIN WILLIAMS

Industrial & Marine Coatings

5.12A

COROTHANE® I HS

ALIPHATIC FINISH COAT

B65-50 SERIES

APPLICATION BULLETIN

Revised 11/06

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.

Iron & Steel

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). Prime any bare steel the same day as it is cleaned.

Poured Concrete

New

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3. Surface must be clean, dry, sound, and offer sufficient profile to achieve adequate adhesion. Minimum substrate cure is 28 days at 75°F. Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 8.0 and 10.0. Allow to dry thoroughly prior to coating.

Old

Surface preparation is done in much the same manner as new concrete; however, if the concrete is contaminated with oils, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release agents, hardeners, etc. must be removed by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. If surface deterioration presents an unacceptably rough surface, Kem Cati-Coat HS Epoxy Filler/Sealer is recommended to patch and resurface damaged concrete.

Fill all cracks, voids and bugholes with ArmorSeal Crack Filler.

Always follow the standard methods listed below:

ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete
ICRI 03732 Concrete Surface Preparation

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, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

APPLICATION CONDITIONS

Temperature:	
air and surface:	20°F minimum, 100°F maximum
material:	45°F minimum Do not apply over surface ice
Relative humidity:	Can be applied at relative humidities up to 99%.

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 compatible with the existing environmental and application conditions.

Reducer/Clean Up

Brush/Roll	Reducer #15, R7K15
Spray	Aromatic 100 Reducer, R2K5
VOC exempt	R7K111

Airless Spray

Pump	30:1
Pressure	1800 - 2000 psi
Hose	1/4" ID
Tip	.011" - .015"
Filter	60 mesh
Reduction	As needed up to 5% by volume

Conventional Spray

	Graco	Binks
Unit		95
Gun	900	
Fluid Nozzle	070	66/65
Air Nozzle	947	66PR
Atomization Pressure	60-70 psi	60-70 psi
Fluid Pressure	15-20 psi	15-20 psi
Reduction	As needed up to 5% by volume	

Brush

Brush	Natural bristle
Reduction	As needed up to 5% by volume

Roller

Cover	1/4" natural or synthetic with phenolic core
Reduction	As needed up to 5% by volume

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

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SHERWIN WILLIAMS.

Industrial & Marine Coatings

5.12A

COROTHANE® I HS

ALIPHATIC FINISH COAT

B65-50 SERIES

APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Stir paint thoroughly prior to use with a power agitator. Filter slowly through a 55 mesh screen.

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

Recommended Spreading Rate per coat:

Wet mils:	3.5 - 5.0
Dry mils:	2.0 - 3.0
Coverage:	326 - 489 sq ft/gal approximate

Drying Schedule @ 4.0 mils wet @ 50% RH:

	@ 40°F	@ 77°F	@ 100°F
To touch:	4 hours	2 hours	45 minutes
To recoat:			
minimum:	24 hours	12 hours	6 hours
maximum:	14 days	14 days	14 days
To cure:	7 days	3 days	3 days

If maximum recoat time is exceeded, abrade surface before recoating. 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.

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 adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #15, R7K15.

Pour a small amount of Reducer #15, R7K15 over the top of the paint in the can to prevent skinning or gelling.

Place a temporary cover over the pail to keep excessive moisture, condensation, fog, or rain from contaminating the coating.

Do not exceed recommended dry film thickness.

When applying Corothane I - HS over dark colors, Corothane I Zinc Primers, or porous surfaces, an intermediate coat or a minimum of 2 finish coats is required for adequate hide and uniformity of appearance.

Tinted colors must be used within 7 days after tinting.

E-Z Roll Urethane Defoamer is acceptable for use. See data page 5.99 for details.

Corothane KA Accelerator is acceptable for use. See data page 5.98 for details.

It is recommend that partially used cans not be sealed/closed for use at a later date.

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

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #15, R7K15. Clean tools immediately after use with Reducer #15, R7K15. Follow manufacturer's safety recommendations when using any solvent.

SAFETY PRECAUTIONS

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