From:	Ablson, Maha
То:	Peppers, Nicki;
cc:	Molohon, Rob;
Subject:	FW: Emailing: QPL-0001.pdf
Date:	Wednesday, March 09, 2011 1:07:32 PM
Attachments:	<u>QPL-0001.pdf</u>

Nicki,

Per 9-1.3B(1) of the Construction Manual, the PEO can code certain RAMs; therefore, the attached RAM for Painting is already approved per QPL does not require evaluation by HQ. If you still have any questions concerning this issue, please feel free to either call or e-mail me. Thank you,

Maha Ablson

RAM Engineer WSDOT, Materials Lab Office: 360.709.5403 Fax: 360.709.5588 mahaab@wsdot.wa.gov

-----Original Message-----From: Peppers, Nicki [mailto:peppersn@columbiarivercrossing.com] Sent: Wednesday, March 09, 2011 11:36 AM To: Ablson, Maha Subject: Emailing: QPL-0001.pdf Importance: High

<<QPL-0001.pdf>> Attached is a revised QPL-0001, the RAM sheet (sheet 2) has been revised per our conversation. This is a high priority RAM, how long will it take to be approved so I can let the subcontractor know?

And again, Thank you so much for helping me with all this material stuff. There's a lot to know!

Have a good day, Nicki

The message is ready to be sent with the following file or link attachments:

#### QPL-0001.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled. \*\*\* eSafe2 scanned this email for malicious content \*\*\*

\*\*\* IMPORTANT: Do not open attachments from unrecognized senders \*\*\*

\*\*\* eSafe scanned this email for malicious content \*\*\*

\*\*\* IMPORTANT: Do not open attachments from unrecognized senders \*\*\*



Washington State Department of Transportation

QPL-0001

March 7, 2011

### **Qualified Product List**

**Contractor Product Information** 

Contractor:	Americ	an Construc	hon Contract N	No: 80	278	
Sub Contractor:			Date:	3	3/11	
Bid Item:	2.07.01	z 3.07.01				

Manufacturer: Coatings Unlimited - Kent, WA

#### **Product Name: Paint Coatings**

Standard Spec : 6-07.3(3)A, Paint - New Steel Structures - Coating Facility

**Product Description :** Blasting and coatings of steel structures Product Restriction :

#### Acceptance Code: 5105

**Code Description :** Acceptance is based on field verification of an APPROVED FOR SHIPMENT tag or stamp. Document, in the field inspectors IDR, the fabrication inspectors initial/name, date, serial number, quantity and either F or D for foreign or domestic steel and/or iron or not marked. If the Contract contains a Buy America clause and the material is marked F or not at all the PEO is responsible for acquiring a Certificate of Material Origin from the Contractor.

Last Updated : Sep 13, 2010

To be completed by the field inspector:

Quantity:

Verified By: Date:

Washington State Department of Transportation

Request	for Ap	proval o	of	Material
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Contract	8078		FA Number		SR I-	5 Da	3 3 11 te 2 3 11
Section T-5	Columbia River	Bridge (WA	0.3 to OR	MP 308)	Coun	VA AND OF	2 states
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submitta	n shall be complete I it may be returned istance in comple	t for information	that was omitte	d.	e at time of	For WSE RAM #	OT Use Only
Bid Item No:	Material or Product/Type		lame and Location of Manufacturer or Pi		Specification Reference	PE/QPL Code	Hdqtr./QPL Code
223	FURNISH BUB	Louisverbarren	TINGS UNLIM	Contraction of the local division of the loc	PLAN ORAWING sheet ND4,		
	SYSTEMS AIR MANIFOLD/	104	20 68th Au	time S	Note #1	5 - 19 E	
	Painting	Sui	を井110		(0-07.3(3)A	5105	
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Project En	Peppers tor Fra	ur Green	Date 3/9/11	State Materials	Engineer		Date
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9. Approval Withheld: Submit samples for preliminary evaluation.     10. Approval Withheld:     11. Miscellaneous Acceptance Criteria.							
Remarks:		ан ан					
Contrac	Operations Engineer				<b>faterials Engine</b> neral File er		Inspection
G Fabrica	tion Inspection	M/S 47365					
DOT Form 35 Revised	12/2008		2				

#### COATINGS UNLIMITED INC.

18420 68<sup>TH</sup> 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.
- 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.

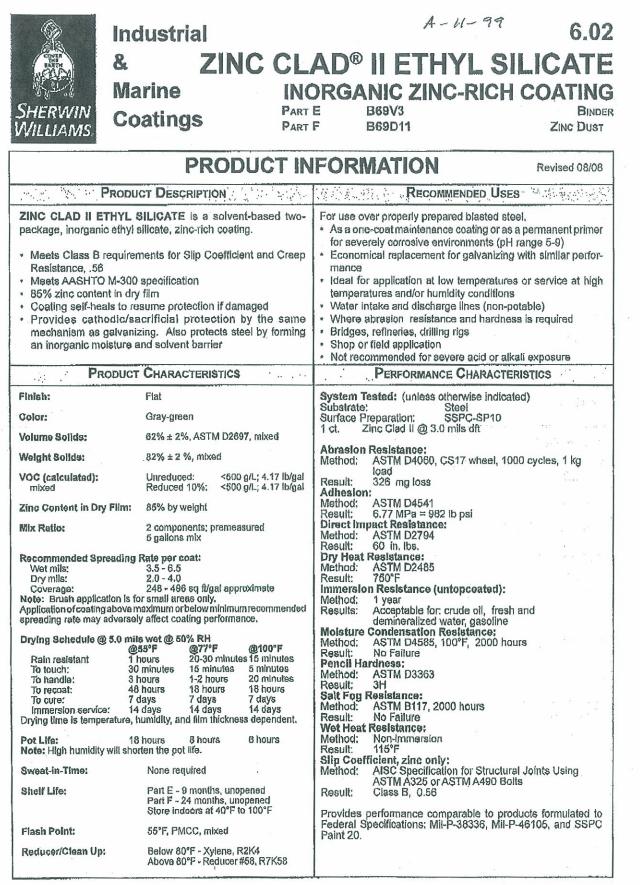
g. A Nordson wet film thickness gage will be used by the painter to ensure proper wet thickness which conforms to solids calculations so that proper dry thickness is provided.

**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.

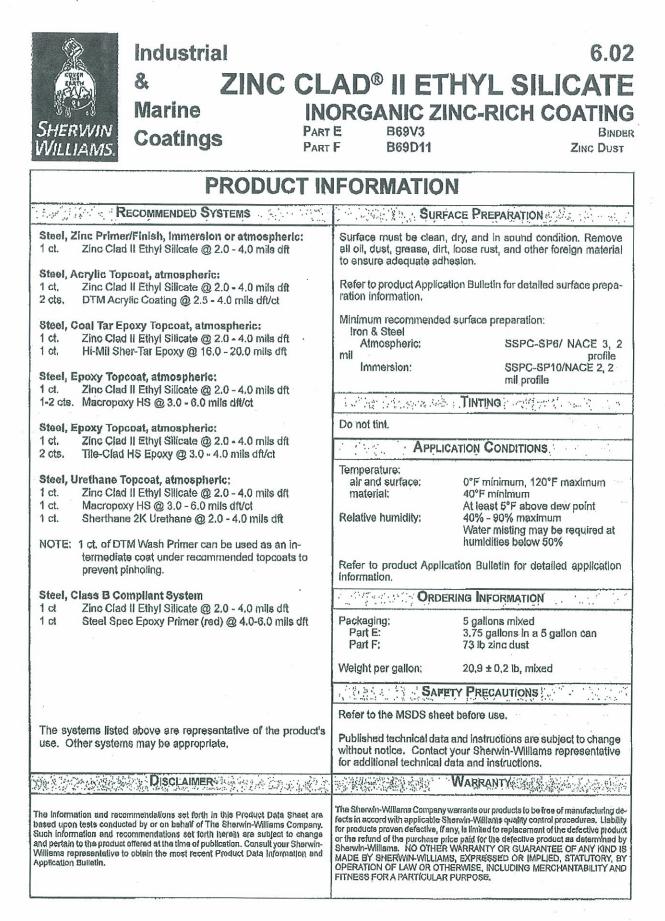
odd Kulesza Coatings Unlimited Inc. QC/ NACE 2

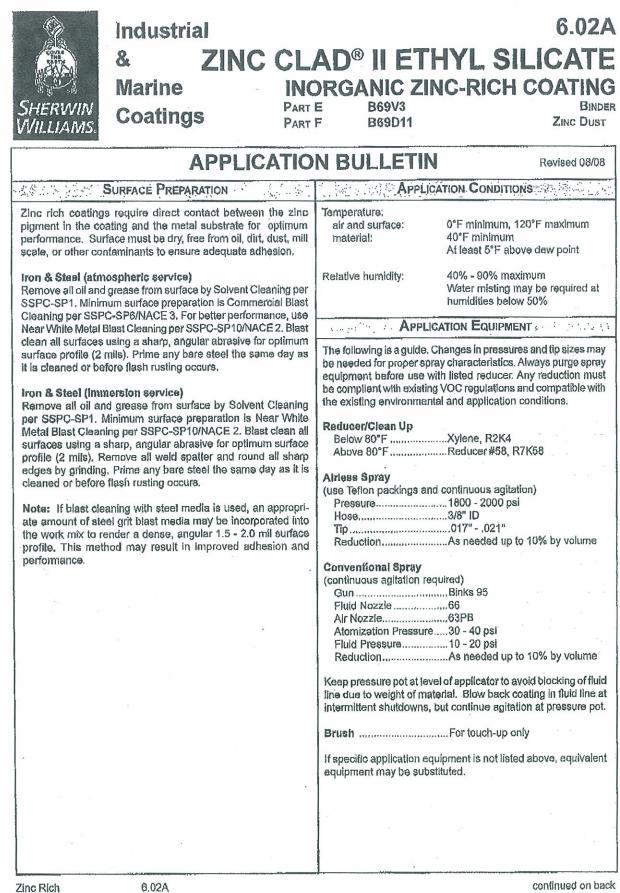
No. 1372 P. 4/15 SCT 9-08, 1(2)C (4 PULOS)



Zinc Rich

continued on back





HERWIN Coatings Part VILLIAMS Part		COATING BINDER ZINC DUST
Application Procedures		and the second
Surface preparation must be completed as indicated. Surface preparation must be completed as indicated. Surface and the second	<ul> <li>Applying a wet full coat, but at minimum film b a complete full coat.</li> <li>Stripe coat all crevices, welds, and sharp angles to in these areas.</li> <li>When using spray application, use a 50% over the gun to avoid holidays, bare areas, and pinhole spray at a right angle.</li> <li>Spreading rates are calculated on volume solids application loss factor due to surface profile, rou the surface, skill and technique of the applicato tion, various surface irregularities, material lost d overthinning, climatic conditions, and excessive Excessive reduction of material can affect film be performance.</li> <li>Do not mix previously catalyzed material with ne Do not apply the material bayond recommended In order to avoid blockage of spray equipment, cli use or before periods of extended downtime with Keep pressure bot at level of applicator to avoid due to weight of material. Blow back coating in fi shutdowns, but continue agitation at pressure per Application above recommended film thicknes crecking.</li> <li>Not recommended for severe acid or alkeli expo Oil base, alkyd, epoxy ester, and silicone alkyd ommanded.</li> <li>Polyurethane topcoats require a tie coat of catal Topcoats may be applied once 50 MEK double i also be used.</li> </ul>	o prevent early failure ap with each pass of as. If necessary, cross and do not include an ghness or porosity of r, method of applica- uring mixing, spillage, nim build. uild, eppearance, and w. pot life. ean equipment before n Xylene, R2K4. I blocking of fluid line uild line at intermittent of. a may result in mud sures. topcoats are not rec- yzed epoxy. Tubs are achieved. No pin hardness test can
CLEAN UP INSTRUCTIONS	Refer to Product Information sheet for additional teristics and properties.	
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.	technical data and instructions.	sentativa tor additional
DISCLAIMER	WARRANTY	

VILLIAMS

No. 1372,512P. 8/15 Sct 9-08.1(2) G 4 PALLES

## 5.07 COROTHANE<sup>®</sup> I IRONOX<sup>®</sup> B B65A11

Coatings

Marine

Industrial

&

REDDISH GRAY

**PRODUCT INFORMATION** \$31-Revised 1/09 PRODUCT DESCRIPTION Recommended Uses COROTHANE I IRONOX B is a single component, VOC compli-Intermediate coat for lead overcoating system ant, moisture curing urethane intermediate coat with micaceous Ideal for stripe coating over primed surfaces. Iron oxide designed for low temperature applications, providing Superior coverage on edges and bridging over cracks due to chemical and abrasion resistance. micaceous iron oxide Must be topcoated for exterior use Low temperature application - down to 20°F Conforms to AWWA D102-03, OCS #2 Outstanding adhesion to most surfaces Acceptable for use as a primer or intermediate coating Outstanding abrasion and chemical resistance Meets requirements of SSPC Paint Spec No. 41 for zino rio · Suitable for use in USDA inspected facilities moisture cure urethane primer on intermediate. Mind PRODUCT CHARACTERISTICS PERFORMANCE CHARACTERISTICS Finish: Low Gloss System Tested: (unless otherwise indicated) Substrate: Steel Color: **Reddish Gray** Surface Preparation: SSPC-SP6 Corothane I GalvaPac Zinc Primer @ 3.0 mils dft 1 ct. Volume Solids: 64% ± 2%, may vary by color 1 ct. Corothane I IronOx B @ 3.0 mils dft Corothane I IronOx A @ 3.0 mils dft 1 ct. Weight Solids: 81.4% ± 2%, may vary by color Abrasion Resistance: VOC (EPA Method 24): <340 g/L; 2.8 lb/gal Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load **Recommended Spreading Rate per coat:** Result: 21 mg loss Wet mils: 5.0 - 8.0 Adhesion: Dry mils: 3.0 - 5.0 Method: ASTM D4541 Coverage: 204 - 340 sq ft/gal approximate Result: 1000 psi **Direct Impact Resistance:** Drying Schedule @ 5.0 mils wet @ 60% RH: Method: ASTM D2794 @40°F @ 75°F @100°F Result: 80 in. lbs. 2 hours 40 minutes 20 minutes **Dry Heat Resistance:** To touch: To handle: 8 hours 6 hours Method: 2 hours **ASTM D2485** To recoat: Result: 300°F Flexibility: minimum: 8 hours 6 hours 2 hours 12 months 12 months 12 months Method: ASTM D522, 180° bend, 7/16 " mandrel maximum: То сиге: 4 days 3 days 1 day Result: Passes Drying time is temperature, humidity, and film thickness depen-Molsture Condensation Resistance: dent. ASTM D4585, 100°F, 300 hours Method: Result: Passes Shelf Life: 12 months, unopened Pencil Hardness: Store indoors at 40°F to 100°F Method: **ASTM D3363** Result: 2HFlash Point: 110°F, PMCC Salt Fog Resistance: Method; ASTM B117, 2500 hours Reducer #15, R7K15 or Reducer/Clean Up: Result: Passes @ 514 /2=1/ loss = 1555 /6m Wet Heat Resistance: Method: Non-immersion ,20 p 1.25 = 25/4

Polyurethane 5.07

continued on back

1 ct.

Application Bulletin.

## 5.07**COROTHANE®** I **IRONOX® B** B65A11

REDDISH GRAY

	PRODUCT INFORMATION				
	RECOMMENDED SYSTEMS	SURFA			
Steel: 1 ct.	Corothane I GalvaPac Zinc Primer @ 3.0 - 4.0 mils dft		iry, and in sound condition. Remove bose rust, and other foreign material sion.		
1 ct. 1 ct.	Corothane I IronOx B @ 3.0 - 5.0 mils dft Corothane I IronOx A @ 2.5 - 3.5 mlls dft	Refer to product Application ration information.	on Bulletin for detailed surface prepa-		
Steel: 1 ct. 1 ct. 1 ct.	Corothane I PrePrime @ 1.5 - 2.0 mils dft Corothane I IronOx B @ 3.0 - 5.0 mils dft Corothane I IronOx A @ 2.5 - 3.5 mils dft	Minimum recommended s * Iron & Steel: * Concrete: Previously Painted:	surface preparation: SSPC-SP6 /NACE 3 SSPC-SP13/NACE 6 SSPC-SP2 or SP3, or ICRI 03732,		
Concre 1 ct. 1 ct. 1 ct.	te, smooth: Corothane I PrePrime @ 1.5 - 2.0 mils dft Corothane I IronOx B @ 3.0 - 5.0 mils dft Corothane I IronOx A @ 2.5 - 3.5 mils dft	* Primer required	CSP 1-3		
	te, rough:	Do not tint.			
<ol> <li>Kern Cati-Coat HS Epoxy Filler/Sealer</li> <li>0 10.0 - 30.0 mills dft/ct, as required to fill voids and provide a continuous substrate.</li> </ol>					
1 ct. 1 ct.	Corothane I IronOx B @ 3.0 - 5.0 mils dft Corothane I Aliphatic Finish Coat @ 2.0 - 3.0 mils dft	Temperature: air and surface: material:	20°F minimum, 100°F maximum 45°F minimum		
Spot pr	usly painted surfaces: ime all bare steel with 1 coat Corothane I GalvaPac ch Primer	Relative humidity:	Do not apply over surface ice Can be applied at relative humidities up to 99%.		
1 ct.	Corothane I IronOx B @ 3.0 - 5.0 mils dft	Refer to product Applicat	tion Bulletin for detailed application		

Information

Packaging:

Weight per gallon:

Refer to the MSDS sheet before use.

FITNESS FOR A PARTICULAR PURPOSE.

for additional technical data and instructions.

ORDERING INFORMATION

13.8 ± 0.2 lb

SAFETY PRECAUTIONS

Published technical data and instructions are subject to change

without notice. Contact your Sherwin-Williams representative

The Sherwin-Williams Company warrants our products to be free of manufacturing de-

tects 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 defermined by Sharwin-Williams. NO OTHER WARRANTY OR GUARANTIES OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY

OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND

WARRANTY

1 and 5 gallon containers

## Industrial 8 Marine

Corothane I IronOx A @ 2.5 - 3.5 mils dft

The systems listed above are representative of the product's

The information and recommendations set forth in this Product Data Sheet are

based upon tests conducted by or on behalf of The Sharwin-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

DISCLAIMER

use. Other systems may be appropriate.

Coatings

Industrial

Marine

Coatings

&

## 5.07A COROTHANE® I IRONOX® B GRAY B65A11

REDDISH GRAY

VILLIAMS. **APPLICATION BULLETIN** Revised 1/09 SURFACE PREPARATION APPLICATION CONDITIONS Surface must be clean, dry, and in sound condition. Remove Temperature: all oil, dust, grease, dirt, loose rust, and other foreign material air and surface: 20°F minimum, 100°F maximum 45°F minimum to ensure adequate adhesion. material: Do not apply over surface ice Iron & Steel Remove all oil and grease from surface by Solvent Cleaning per Relative humidity: Can be applied at relative humidities SSPC-SP1. Minimum surface preparation is Commercial Blast up to 99%. 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 APPLICATION EQUIPMENT surface profile (2 mils). Prime any bare steel the same day as it is cleaned or before flash rusting occurs. The following is a guide, Changes in pressures and tip sizes may be needed for proper spray characterístics. Always purge spray **Poured Concrete** equipment before use with listed reducer. Any reduction must New be compliant with existing VOC regulations and compatible with For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI the existing environmental and application conditions. 03732, CSP 1-3. Surface must be clean, dry, sound, and offer sufficient profile to achieve adequate adhesion. Minimum Reducer/Clean Up ...... Reducer #15, R7K15 or R7K111 substrate cure is 28 days at 75°F. Remove all form release (VOC exempt) agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting, mechani-Airless Spray cal 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, Hose......1/4" ID Old Тір.....013" - ,017" Surface preparation is done in much the same manner as new Filter.....60 mesh concrete; however, if the concrete is contaminated with oils, Reduction.....As needed up to 10% by volume grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release **Conventional Spray** agents, hardeners, etc. must be removed by sandblasting, shot-Unit.....Graco Binks blasting, mechanical scarification, or suitable chemical means. 95 If surface deterioration presents an unacceptably rough surface, Fluid Nozzle ......070 66/65 Kem Cati-Coat HS Epoxy Filler/Sealer Is recommended to patch 66PR Air Nozzle......947 and resurface damaged concrete. 60-70 psi Atomization Pressure.....60-70 psi Fill all cracks, voids and bugholes with ArmorSeal Crack 15-20 psi Filler. Reduction......As needed up to 10% by volume Always follow the standard methods listed below: ASTM D4258 Standard Practice for Cleaning Concrete. Brush ASTM D4259 Standard Practice for Abrading Concrete. Brush......Natural bristle ASTM D4260 Standard Practice for Etching Concrete. Reduction.....As needed up to 10% by volume ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Roller SSPC-SP 13/Nace 6 Surface Preparation of Concrete Cover ...... 1/4" natural or synthetic with phe-ICRI 03732 Concrete Surface Preparation nolic core **Previously Painted Surfaces** Reduction......As needed up to 10% by volume If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled If specific application equipment is not listed above, equivalent by abrading the surface. Apply a test area, allowing paint to dry equipment may be substituted. 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

Polyurethane 5.07A

continued on back

# SHERWIN WILLIAMS.

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Industrial

& Marine Coatings

## 5.07A COROTHANE® I IRONOX® B IGRAY B65A11

REDDISH GRAY

APPLICATION BULLETIN				
	PERFORMANCE TIPS			
Surface preparation must be completed as indicated.	Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.			
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:	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 in-			
Recommended Spreading Rate per coat:Wet mils:5.0 - 8.0Dry mils:3.0 - 5.0Coverage:204 - 340 sq ft/gal approxímate	clude 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.			
Drying Schedule @ 6.0 mils wet @ 50% RH: @40°F @ 76°F @100°F	Excessive reduction of material can affect film build, appear- ance, and adhesion.			
To touch: 2 hours 40 minutes 20 minutes To handle; 8 hours 6 hours 2 hours To recoat:	In order to avoid blockage of spray equipment, clean equip- ment before use or before periods of extended downtime with Reducer #15, R7K15.			
minimum: 8 hours 6 hours 2 hours maximum: 12 months 12 months 12 months To cure: 4 days 3 days 1 day	Pour a small amount of Reducer #15, R7K15 over the top of the paint in the can to prevent skinning or gelling.			
Drying time is temperature, humidity, and film thickness depen- dent.	Place a temporary cover over the pail to keep excessive moisture, condensation, fog, or rain from contaminating the coating.			
Application of coating above maximum or below minimum recommended spreading rate may adversely affect 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.			
τ. · · · · · · · · · · · · · · · · · · ·	Refer to Product Information sheet for additional performance			
CLEAN UP INSTRUCTIONS	SAFETY PRECAUTIONS			
Clean splils and spatters immediately with Reducer#15, R7K15. Clean tools immediately after use with Reducer #15, R7K16.	Refer to the MSDS sheet before use.			
Follow manufacturer's safety recommendations when using any solvent,	Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and Instructions.			
STREAST STREET DISCLAIMER	WARRANTY			
The information and recommendations set form in this Product Data Sheet are based upon tests conducted by or on behalf of The Shervin-Williams Company. Such information and recommendations set forth herein are subject to change and partain to the product offered at the time of publication. Consult your Shervin- Williams representative to obtain the most recent Product Data Information and Application Bulletin.	The Sherwin-Williams Company warrants our products to be free of manufacturing de- fects 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 determinent by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS POR A PARTICULAR PURPOSE.			

No. 1372 UP. 12/15

5.12Industrial 6-11-99 & COROTHANE® I HS Marine ALIPHATIC FINISH COAT Coatings B65-50 SERIES \$55 PRODUCT INFORMATION Revised 11/06 RECOMMENDED USES **PRODUCT DESCRIPTION** er , etc. ing 1.1.1 COROTHANE I HS is a single component, VOC compliant, · Color coat where maximum color and gloss retention are molsture curing urethane designed for low temperature or high regulred humidity applications while providing UV resistance and chemical resistance equivalent to two part urethane coatings. · Suitable for use in the following industries: · Low temperature application - down to 20°F · Petro-Chemical Marine · Superior resistance to yellowing, chalking, or degradation Industrial · Pulp and Paper by sunlight Bridge and Highway Rail Superior adhesion to most prepared surfaces Water and Waste Water · Superlor abrasion resistance Suitable for use in USDA inspected facilities. Outstanding chemical resistance Conforms to AWWA D102-03 OC\$ #2 VOC compliant One component PRODUCT CHARACTERISTICS PERFORMANCE CHARACTERISTICS System Tested: (unless otherwise indicated) Finish: Gloss Substrate: Steel Surface Preparation: SSPC-SP6 Wide range of colors available Color: Corothane I MIO-Aluminum @ 3.0 mils dft 1 ct; 1 ct: Corothane I HS @ 3.0 mils dft 61% ± 1%, may vary by color Volume Solida: Abrasion Resistance: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load Method: Weight Solids: 77% ± 2% Result: 80 mg loss Adhesion: VOC (EPA Method 24): Unreduced: <340 g/L; 2.8 lb/gal ASTM D4541 Method: Result: 1296 psi **Recommended Spreading Rate per coat:** Corrosion Weathering: ASTM D5894, 12 cycles, 4032 hours Wet mils: 3.5 - 5.0 Method: Result: Rating 10 per ASTM D610 for rusting 2.0 - 3.0Dry mils: Rating 10 per ASTM D714 for blistering 326 - 489 sq ft/gal approximate Coverage: Direct Impact, topcoat only: Method: ASTM D2794 Drying Schedule @ 4.0 mils wet @ 50% RH: Result: 70 in lb @ 40°F @ 77°F @ 100°F Flexibility, topcoat only: 2 hours 45 minutes 4 hours To touch: ASTM D522, 180° bend, 1/8" mandrel Method: To recoat: Result: Passes 12 hours 6 hours minimum: 24 hours Humidity: 14 days maximum: 14 days 14 days ASTM-D4585, 1000 hours Method: 3 days 3 days 7 days To cure: Result: Rating 10 per ASTM D610 for rusting Rating 10 per ASTM D714 for blistering If maximum recoattime is exceeded, abrade surface before recoating. Pencil Hardness: Drving time is temperature, humidity, and film thickness dependent. Method: **ASTM D3363** HB Result: Salt Fog Resistance: Shelf Life: 12 months, unopened Store indoors at 40°F to 100°F. Method: ASTM B117, 1000 hours Rating 10 per ASTM D610 for rusting (Tinted colors must be used within 7 Result: Rating 10 per ASTM D714 for blistering days after tinting) Thermal Cycling : ASTM D2246, 15 cycles Method: 101°F, Seta Flash Flash Point: Passes, no cracking, checking, or blistering; no loss of adhesion; 100% gloss retention Result: Reducer #15, R7K15, R7K100, or Reducer/Clean Up: R7K111 (VOC exempt) Meets requirements of SSPC Paint 38, Level II. 5.12 @ 314/23 11 Wass 250 31 continued on back Polyurethane . 22 × 1.25 = 1.27/5F



Steel:

1 ct.

1 ct. 1 ct.

Steel:

1-2 cts.

Steel:

1 ct.

1 ct.

1 ct.

Steel:

1 ct.

1 ct.

1 ct. 1 ct.

1 ct

1 ct.

1 ct.

1 ct.

1 ct.

1 ct.

1 ct.

٦O

Zinc Primer

1-2 cts

Concrete, smooth:

Concrete, rough:

1 ct.

Industrial &

Marine Coatings

# **COROTHANE® I HS ALIPHATIC FINISH COAT** B65-50 SERIES

PRODUCT INFORMATION SURFACE PREPARATION RECOMMENDED SYSTEMS Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material Corothane I MIO-Aluminum @ 2.0 - 3.0 mils dft Corothane I Ironox B @ 3.0 - 5.0 mils dft Corothane I HS @ 2.0 - 3.0 mils dft to ensure adequate adhesion. Refer to product Application Bulletin for detailed surface preparation information. Corothana I MIO-Aluminum @ 2.0 - 3.0 mils dft Minimum recommended surface preparation: \* Iron & Steel: SSPC-SP6/NACE 3 Corothane | HS @ 2.0 - 3.0 mils dfl/ct \* Concrete & Masonry; SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3 Corothane | GalvaPac Zinc Primer @ 3.0 - 4.0 mils dft Previously Painted SSPC-SP2 or SP3 Corothane I Ironox B @ 3.0 - 5.0 mils dff \* Primer required Corothane I HS @ 2.0 - 3.0 mils dft 總統國家 建合合的合金 **Tinting**合合。 《 Till Sector 1. 11 Corothane | PrePrime @ 1.0 - 1.5 mils dft Tint B65W51 and B65T54 only with 844 colorants, 100% tint Corothane | MIO-Aluminum @ 2.0 - 3.0 mils dft strength. Must be used within 7 days after tinting. Corothane I Ironox B @ 3.0 - 5.0 mils dft Corothane I HS @ 2.0 - 3.0 mils dft APPLICATION CONDITIONS Steel (Epoxy Primer): Temperature: Dura-Plate MT @ 6.0 - 8.0 mils dft Corothans I HS Coat @ 2.0 - 3.0 dft/ct air and surface: 20°F minimum, 100°F maximum 45°F minimum material: Do not apply over surface ice Corothane | PrePrime @ 1.0 - 1.5 mils dft Can be applied at relative humidi-Relative humidity: Corothane | HS @ 2.0 - 3.0 mils dft ties up to 99%. Refer to product Application Bulletin for detailed application On deeply profiled or damaged concrete floor: 1 ct. Kem Cati-Coat HS Epoxy Filler/Sealer information. @ 10.0 - 20.0 mils dfl/ct, as required to fill voids ORDERING INFORMATION and provide a continuous substrate. Corothane | HS @ 2.0 - 3.0 mils dft 1 and 5 gallon containers Packaging: **Previously Painted Surfaces:** Weight per gallon: 11.79 ± 0.2 lb, may vary by color. Spot prime bare steel with 1 coat of Corothane I GalvaPac SAFETY PRECAUTIONS Corothane | HS @ 2.0 - 3.0 mils dft Refer to the MSDS sheet before use. Corothane I Ironox B @ 3.0 - 5.0 mils dft Corothane | HS @ 2.0 - 3.0 mils dft Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams repre-(Check compatibility)

sentative for additional technical data and instructions.

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

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No. 1372 P. 14/15

# 5,12A **COROTHANE® I HS ALIPHATIC FINISH COAT**

B65-50 SERIES

	S RULLETIN Revised 11/06
APPLICATION	
	APPLICATION CONDITIONS
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.	Temperature: air and surface: 20°F minimum, 100°F maximum material: 45°F minimum Do not apply over surface ice
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-	Relative humidity: Can be applied at relative humidi- ties up to 99%.
SP10/ NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare	Application Equipment
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	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 appli- cation conditions.
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, mechani- cal 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.	Reducer/Clean Up Brush/Roll
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 olls, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4259. Form release agents, hardeners, etc. must be removed by sandblasting, shof- blasting, mechanical scarification, or sultable chemical means. If surface deterioration presents an unacceptably rough sur-	Airless Spray       30:1         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
face, 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 D4260 Standard Practice for Etching Concrete. ASTM F1869 Standard Test Method for Measuring Moisture	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 5% by volume
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.	Brush Brush
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	Cover 1/4" natural or synthetic with phenolic core Reduction As needed up to 5% by volume
coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.	If specific application equipment is not listed above, equiva- lent equipment may be substituted.

Polyurethane 5.12A



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## 5.12A COROTHANE<sup>®</sup> I HS ALIPHATIC FINISH COAT

B65-50 SERIES

APPLICATION BULLETIN				
APPLICATION PROCEDURES				PERFORMANCE TIPS
Surface preparation must be completed as indicated.				Stripe cost all crevices, welds, and sharp angles to prevent early failure in these areas.
Stir paint thoroughly through a 55 mesh	SCYGGN.			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.
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				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 applica- tion, various surface irregularities, material lost during mixing, spill- age, overthinning, climatic conditions, and excessive film build. Excessive reduction of material can affect film build, appearance, and
Coverage: Drying Schedule (		489 sq ft/gal app @ 50% RH: @ 77°F	@ 100°F	adhesion. In order to avoid blockage of spray equipment, clean equipment be- fore use or before periods of extended downtime with Reducer #15,
To touch: To recost: minimum:	4 hours 24 hours	2 hours 12 hours	45 minutes 6 hours	R7K15. Pour a small amount of Reducer #15, R7K15 over the top of the paint in the can to prevent skinning or gelling.
maximum: To cure:	14 days 7 days	14 days 3 days	14 daya 3 days	Place a temporary cover over the pail to keep excessive moisture, condensation, fog, or rain from contaminating the coating.
lf maximum recoal t	lme is exceeded	l, abrade surface	before recoating.	Do not exceed recommended dry film thickness.
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.			mrecommended	When applying Gorothane 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 appear- ance.
				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 5.96 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 char- acteristics and properties.
And the South of the	CLEAN UP IN	STRUCTIONS	a la grande	SAFETY PRECAUTIONS
Clean spills and spi tools immediately	after use with	Reducer #15, F	R7K15. Follow	Refer to the MSDS sheet before use.
manufacturer's safety recommendations when using any solvent,			g any solvent,	Published technical data and instructions are subject to change with- out notice. Contact your Sherwin-Williams representative for addi- tional technical data and instructions.
DISCLAIMER			paten de	WARRANTY
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