Submit Bids To: City of Hollywood 2600 Hollywood Boulevard Hollywood, Florida 33020	CITY OF HOLLYWOOD, FLORIDA
Office of City Clerk, Room 221	BIDDER ACKNOWLEDGMENT
Bid Title: MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant Bid No.: 14-5108	Bid must be received prior to 10:00 A.M., February 11, 2014 and may not be withdrawn within 60 calendar days after such date and time. Bids received by the date and time specified will be opened and read publicly at the Southern Regional
A Cone of Silence is in effect with respect to this Bid. The Cone of Silence prohibits certain communications between potential vendors and the City. For further information, please refer to Section 30.15(F) of the City's Code of Ordinances.	Wastewater Treatment Plant Conference Room, 1621 N. 14 <sup>th</sup> Avenue, Hollywood, Florida 33019, Building A, 1 <sup>st</sup> Floor at 10:30 A.M. on February 11, 2014. All Bids received after the specified date and time will be returned unopened. Project Manager: Leslie H. Pettit, P.E. Telephone No.: (954) 921-3930

### BIDDER ACKNOWLEDGMENT

This form must be completed and submitted along with the complete bid document by the date and the time of bid opening. The bid summary sheet pages on which the bidder actually submits a bid and any pages upon which information is required must be completed and attached with all pages of the bid document.

Bidder's Name: Excell Caulking & Waterproofing, Inc.	Fed. ID No. or <b>SS</b> Number 65-0718904
Complete 2011 Harding Street	Telephone No.: (954)922-5630
Mailing Hollywood, FL 33020 Address:	Fax No.: (954)922-5642
Do You Have a Permanent Office Located in the City of Hollywood? Yes 📉 No 🗔	E-Mail Address: exwaterp@bellsouth.net
Indicate type of organization below:	Acknowledgement of Addendum #1
Corporation 🕅 Partnership 🗌 Individual 🗌 Other	on Feb. 3, 2014

ATTENTION: FAILURE TO SIGN (<u>PREFERABLY IN BLUE INK</u>) OR COMPLETE ALL BID SUBMITTAL FORMS AND FAILURE TO SUBMIT ALL PAGES OF THE BID DOCUMENT AND ANY ADDENDUMS ISSUED MAY RENDER YOUR BID NON-RESPONSIVE.

### CHECK BOX BELOW TO ACKNOWLEDGE THIS BID.

The undersigned bidder certifies that this bid is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a bid for the same materials, supplies, services, or equipment, and is in all respects fair and without collusion or fraud. I certify acceptance of this bid's terms, conditions, specifications, attachments and addenda. Further, by checking the Agree box listed below (if submitting Bid online) and by signing below in blue ink (if submitting Bid via mail, etc.), pages 2 through 5 are acknowledged and accepted as well as any special instruction sheet(s) if applicable. I am authorized to bind performance of this bid for the above bidder.

Agree 🕱	Gary_Shimko	president	Feb 11, 2014
	Authorized Name (Type or Print)	Title	Date
	Authorized Signature	-	
	Autorized Signature		

Water Treatment Plant MS/RO Operations Bldg. Wall Sealant Replacement

### "Pricing Page Sheet 1 of 2"

<u>NOTE:</u> Give both unit price and extended total. Prices <u>must</u> be stated in units to quantity specified in the bid specifications. In case of a discrepancy in computing the amount of the bid, the unit price quoted will govern and the total will be adjusted accordingly. <u>No spaces are to be left blank, but should be marked as follows</u>:

```
N/A = Not Applicable
N/C = No Charge
N/B = No Bid
```

### Spaces marked with a zero (0) will be considered no charge.

If this Proposal is accepted, the undersigned Bidder agrees to complete all work under this contract within <u>45</u> calendar days following the issuance of the Notice to Proceed. **UNIT PRICE PREVAILS OVER TOTAL PRICE.** All entries on this form must be typed or written in block form in ink. Quantities provided are for information purposes.

<u>No.</u>	Description	Qty	Unit	Unit Price	Total
1.	Pressure Clean, repair/patch, exterior of exposed pre-cast concrete panels at the MS/RO Operations Building per attached plans.	1	LS	\$.20	\$3,628.00
2.	Removal of existing caulking/sealant from the exterior joints, seams, and cracks at the MS/RO Operations Building. Supply and provide Sikaflex – 2c NS EX Mix in all exterior joints seams and cracks at the MS/RO Operations Building per attached plans and				
	specifications.	1	LS	\$3.76	\$16,374.00
	E BID TOTAL FOR COMPLETE JECT:	\$20,002.00			
	Twenty Thousand two D	ollars			

### TOTAL BASE BID IN WRITING

\*\*Please Note: Addendum #1 dated Feb. 3, 2014 is acknowledged

### "Pricing Page Sheet 2 of 2" (revised 2/3/14)

### **Bid Alternate**

A.	Additional cost to provide and apply Evonik Industries Protectosil CIT to the exterior of the exposed concrete panels of the MS/RO Operations Building per attached plans and specifications.				
		1	LS	\$1.37	\$24,853.00
В.	Additional cost to surface preparation and re-painting of the exterior of the exterior louvers and the exterior of the five exterior man doors to match existing.	1	LS	\$215.00	\$8,850.00

It is the City of Hollywood's intent to award this project to the lowest responsive and responsible bidder for the "Total Base Bid" plus any City selected "Bid Alternates".

### NOTES:

- 1. REFER TO MANUFACTURE PRODUCT DATA SHEET AND SCOPE OF WORK FOR ADDITIONAL DESCRIPTION OF ITEMS.
- 2. THE CONTRACTOR SHALL BE SELECTED BASED UPON THE TOTAL BASE BID FOR ITEMS 1 THROUGH 2 PLUS ANY SELECTED BID ALTERNATE ITEMS.

Contractor Name: Excell Caulking & Waterproofing, Inc.

# PLEASE RETURN AN ORIGINAL AND THREE COPIES OF ENTIRE BID DOCUMENT. **BID SUBMITTAL COMPLETION CONFIRMATION:**

<u>_X</u>	I, the Bidder, have completed and signed (preferably in blue ink) all required bid document pages.
<u>_X</u>	I, the Bidder, acknowledge reading information relative to the City's "Local Preference" as contained in this document and providing for such information. (If applicable to this proposal)
_X_	I, the Bidder, acknowledge reading and signing the Hold Harmless Statement.
<u>x</u> <u>x</u>	I, the Bidder, have submitted my bid on the bid sheets provided, and acknowledge that bids not submitted on bid sheets provided may be rejected.
_ <u>X_</u>	I, the Bidder, have filled in all spaces on the pricing page as noted, and acknowledge that bids with spaces left blank on the pricing page may be rejected.
<u>_X</u>	I, the Bidder, have included all information, certificates, licenses and additional documentation as required by the City in this bid document.
_ <u>X_</u>	I, the bidder, have checked for any addendums to this bid, and will continue to check for any addendums up to the due date and time of this bid.
X _X _X _X	I, the Bidder, have included on the face of the envelope, my company name and return address, the date and time of bid opening, and the bid number.
_X	I, the Bidder, have submitted one (1) original and one (1) copy of the entire bid document and addendums.
_X	I have read and completed (if applicable) the "Disclosure of Conflict of Interest".
<u>_X</u>	I, the Bidder, am aware that a Notice of Intent to award this bid shall be posted on the City's website at <u>www.hollywoodfl.org</u> and on the Procurement Services bulletin board in room 303 at City Hall, and that it is my responsibility to check for this posting. Also, I have provided my email address, as the City, at its discretion, may provide me information by such means regarding this procurement process.
_ <u>X</u>	I, the Bidder, have submitted all supporting documentation for local preference eligibility, which must be received with the bid package prior to the bid opening date and time (if applicable).
NAME OF CC	OMPANY:Excell Caulking & Waterproofing, INc.
	AME:Gary Shimko, president
DATE:Fe	ebruary 11, 2014 12

Water Treatment Plant MS/RO Operations Bldg. Wall Sealant Replacement

### HOLD HARMLESS AND INDEMNITY CLAUSE:

# Excell Caulking & Waterproofing, Inc / Gary Shimko,, president

# (Company Name and Authorized Signature, Print Name)

,the contractor shall indemnify, defend and hold harmless the City of Hollywood, its elected and appointed officials, employees and agents for any and all suits, actions, legal or administrative proceedings, claims, damage, liabilities, interest, attorney's fees, costs of any kind whether arising prior to the start of activities or following the completion or acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the contractor, or anyone acting under its direction, control, or on its behalf in connection with or incident to its performance of the contract.

Excell Caulking & Waterproofing, Inc. / Gary Shimko, president

### (Company Name and Authorized Signature, Print Name)

Further certifies that it will meet all insurance requirements of the City of Hollywood and agrees to produce valid, timely certificates of coverage.

Disclosure of Conflict of Interest: Vendor shall disclose below, to the best of his or her knowledge, any City of Hollywood officer or employee, or any relative of any such officer or employee as defined in Section 112.3135, Florida Statutes, who is an officer, partner, director or proprietor of, or has a material interest in the vendor's business or its parent company, any subsidiary, or affiliated company, whether such City official or employee is in a position to influence this procurement or not.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City of Hollywood Purchasing Ordinance.

Name None

Relationship

In the event the vendor does not indicate any names, the City shall interpret this to mean that no such relationship exists.

# EXCELL Caulking & Waterproofing, Inc.

2011 Harding Street Hollywood, Florida 33020 Office (954)922-5630 --- Fax (954)922-5642 State of Florida CBC#1257380 CC# 97-8339-PU-X --- CC# 97-BS 000 28 --- CC# 0070135 E-mail: <u>exwaterp@bellsouth.net</u> Website: <u>www.excellwaterproofing.com</u>

### CITY OF HOLLYWOOD MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant BID #14-5108

REFERENCES (Per page 8 of Bid Package)

- Broward Health North 201 East Sample Road Deerfield Beach, FL Complete waterproofing of northeast & southeast hospital wings Richard Polemeni (954) 355-5979 <u>Rpolemeni@browardhealth.org</u>
- American Express Company 777 American Expressway Fort Lauderdale, FL 33337 Complete waterproofing of the entire complex Frank Foley, Senior Project Manager (954) 503-0468 Office (954) 503-3144 Fax Frank.X.Foley@aexp.com
- Simon Group/Shops at Sunset Place 5701 Sunset Drive, Suite 350 South Miami, FL 33143 Exterior waterproofing of the entire mall Derrick Brown, General Manager (305) 663-7128 Direct (305) 663-0167 Fax <u>derbrown@simon.com</u>
- 4) South Florida Water Management District 3301 Gun Club Road West Palm Beach, FL 33406 Building envelope waterproofing (Main administrative office facility) John Creswell, P.E., Facilities Engineer (561)686-8800



# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574 Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

ADM 15-06

February 1, 2000

Excell Caulking & Weatherproofing, Inc. 7020 S.W. 22<sup>nd</sup> Court – Suite A Davie, FL 33317

Dear Sirs:

I would like to thank you for the superb job your company did during the B-1 Weatherproofing Project, Contract Number C-10547.

This project was initiated to seal the building envelope of the South Florida Water Management District's main administrative office facility located in West Palm Beach. The building is a three-story, 110,000 square foot structure with a mechanical room on the roof and was constructed in 1988 using pre-cast concrete panels. The facility also has over 300 windows and several storefronts. Excell, Inc., performed the weatherproofing and caulking project exceptionally well and with a high degree of competence within budget and on time. I would also like to add that Excell, Inc., was very receptive to the owner and owner representatives during the course of the contract and performed some tasks over and above the contract minimums. Excell, Inc., also corrected all punch list items within 24 hours of notification.

Please feel free to use me as a reference on future projects, as I believe your company is a first rate company that I would recommend to anyone requiring the services of a competent weatherproofing contractor.

Sincerely,

John Creswell, P.E.

Facilities Engineer General Services Division

JC/se

GOVERNING BOARD

Michael Collins, Chairman Michael D. Minton, Vice Chairman Mitchell W. Berger Vera M. Carter Gerardo B. Fernandez Patrick J. Gleason Nicolas J. Gutierrez, Jr. Harkley R. Thornton Trudi K. Williams **EXECUTIVE OFFICE** 

Frank R. Finch, P.E., Executive Director James E. Blount, Chief of Staff

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# **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY) 2/4/2014

THIS CERTIFICATE IS ISSUED AS A MA CERTIFICATE DOES NOT AFFIRMATIVE BELOW. THIS CERTIFICATE OF INSUF REPRESENTATIVE OR PRODUCER, AND	ANCE	R NEGATIVELY AMEND, DOES NOT CONSTITU	, EXTE	ND OR AL	TER THE CO	VERAGE AFFORDED B	ү тн	E POLICIES
IMPORTANT: If the certificate holder is the terms and conditions of the policy, co certificate holder in lieu of such endorser	ertain	policies may require an e						
PRODUCER	neniqə		CONTA	CT Wanda	Torres		-	
Corporate Insurance Advisors	3		PHONE	1054	) 315-5000	FAX (A/C, No): (	954) 3	15-5050
100 NE 3rd Avenue			É-MAIL		s@ciafl.n	(A/C, No): \	55475	10 0000
Suite 1000			ADDRE				_	NAIC #
Ft. Lauderdale FL 3330	)1					alty Ins. Co.		NAIC #
INSURED	-					ce Company		25011
Excell Caulking & Waterproof	ing	Inc				Industry Insuran		19410
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Hollywood FL 3302	0		INSURE					
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DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES			- Cabadu	10.16	a la namilitad)			
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CERTIFICATE HOLDER			CANC	CELLATION				1
City of Hollywood			THE	EXPIRATIO	N DATE TH	ESCRIBED POLICIES BE CA EREOF, NOTICE WILL BI CY PROVISIONS.		
2600 Hollywood Blvd. Hollywood, FL 33020-48	07	121		RIZED REPRES				
			M Scl	hwartz **	***/WANDA	Mark R. A	ch	warter

The ACORD name and logo are registered marks of ACORD

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		CERTIFICAT	E OF LIA	BILITY I	NSURANCE		Date 12/31/2013
Pro	ducer:	Lion Insurance Company 2739 U.S. Highway 19 N. Holiday, FL 34691		This Cert rights up	ificate is issued as a mat	ter of information only and c . This Certificate does not ar the policies below.	onfers no
		(727) 938-5562			Insurers Affording Co	overage	NAIC #
Inst	insured: South East Personnel Leasing, Inc. & Subsidiaries			aries Insurer A:	Lion Insurance Compa	ny	11075
	2739 U.S. Highway 19 N.			Insurer B:			
		Holiday, FL 34691		Insurer C:			
				Insurer D: Insurer E:			
Cov	erage	S		Insurer L.			
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INSR LTR	ADDL INSRD	Type of Insurance	Policy Number	Policy Effective Date (MM/DD/YY)	Policy Expiration Date (MM/DD/YY)	Limit	8
T		GENERAL LIABILITY	1			Each Occurrence	5
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	Any prop	rietor/partner/executive officer/member				E.L. Each Accident	\$1,000,000
	excluded					E.L. Disease - Ea Employee	\$1,000,000
	f Yes, de	scribe under special provisions below.				E.L. Disease - Policy Limits	\$1,000,000
	Other		Lion Insurar	ice Company is	A M Best Company	rated A- (Excellent). AMI	# 12616
		of Operations/Locations/Vehicles/E					
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Covera						in FL.	
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Coverag \ list of <b>Projec</b>	ge does r The activ <b>t Name:</b>	not apply to statutory employee(s) or indeper ve employee(s) leased to the Client Company	ident contractor(s) of can be obtained by f	the Client Compan axing a request to (		(727) 938-5562.	
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Covera <sub>i</sub> A list of <b>Projec</b> SSUE	ge does r the activ <b>t Name:</b> 11-29-11	not apply to statutory employee(s) or indeper re employee(s) leased to the Client Company (TD) / REISSUE 02-13-12 (TD)Reissued 12/ IOLDER CITY OF HOLLYWOOD	ident contractor(s) of can be obtained by f	the Client Company axing a request to ( d 12/9/13 (SH) CANCELLATION Should any of the a insurer will endeavo	727) 937-2138 or by calling bove described policies be cance r to mail 30 days written notice t no obligation or liability of any ki	Begin Dat	of, the issuing off, but failure to





1621 N. 14<sup>th</sup> Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

# DATE: February 3, 2014

# FOR: MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant

FILE NUMBER: 14-5108

ALL BIDDERS BE ADVISED OF THE FOLLOWING CHANGES TO THE ABOVE REFERENCED PROJECT AS LISTED BELOW:

This addendum is issued as part of the Bidding Documents for the above described project. The changes incorporated in this addendum shall be considered as a part of the documents and shall supersede, amend, add to, clarify, or subtract from those conditions shown in the original documents. The bidder shall coordinate all modifications herein with all trades and disciplines related to the work. The Bidder shall acknowledge receipt of this addendum on the Bid Form by addendum number and date. Failure to do so may subject Bidder to disgualification.

### Item 1: <u>Revised Bid Form</u>

See attached revised bid form.

# Item 2: Pre-Bid Meeting Minutes & Attendance Record

See attached pre-bid meeting minutes and attendance record.

# Item 3: <u>Response to Written Question from Excell Caulking & Waterproofing,</u> Inc.

Question regarding the expansion joints: If the materials are dissimilar (i.e., installing urethane in place of old silicone) is the proper repair procedure to grind the concrete clean, install backer rod and new urethane sealant?

Response: Yes, see the new sealant manufacture recommends for installation.



1621 N. 14<sup>th</sup> Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

# Item 4: Revised Louver & Door Painting Scope of Work & Specifications

There are a total of thirty-four 3'-4" wide by 8'-0" high aluminum louvers on the east and west sides of the first floor of the RO/MS Operations Building. The exterior of these louvers have pitted/corroded surfaces with peeling paint. The interior of the louvers are to remain undisturbed and the contractor shall install a protective covering as required to protect the interior of the building during surface preparation and re-painting of the louver exterior. Upon approval of the louver surface preparation by the City's inspector, the Contractor shall re-paint the exterior of the existing louver to match the color of the existing paint on the louvers.

There are a total of five exterior man doors with door exteriors to be cleaned and painted. Painting of the roll-up door is not required. Three man doors are located on the west side of the first floor of the building and two man doors on the second floor at the southwest corner of the building. Painting of the doors interior is not part of this project.

See attached specifications.

ALL OTHER TERMS, CONDITIONS AND SPECIFICATIONS SHALL REMAIN THE SAME. THIS ADDENDUM SHALL BE ATTACHED TO THE CONTRACT DOCUMENTS AND THE RECEIPT OF THE SAME SHALL BE NOTED IN THE PROPOSAL IN THE SPACE PROVIDED.

Jitendra Patel, P.E., Assistant Director Department of Public Utilities – ECSD



1621 N. 14<sup>th</sup> Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

> Item 1 Revised Bid Form

### "Pricing Page Sheet 1 of 2"

- <u>NOTE:</u> Give both unit price and extended total. Prices <u>must</u> be stated in units to quantity specified in the bid specifications. In case of a discrepancy in computing the amount of the bid, the unit price quoted will govern and the total will be adjusted accordingly. <u>No</u> spaces are to be left blank, but should be marked as follows:
  - N/A = Not Applicable N/C = No Charge N/B = No Bid

### Spaces marked with a zero (0) will be considered no charge.

If this Proposal is accepted, the undersigned Bidder agrees to complete all work under this contract within <u>45</u> calendar days following the issuance of the Notice to Proceed. **UNIT PRICE PREVAILS OVER TOTAL PRICE.** All entries on this form must be typed or written in block form in ink. Quantities provided are for information purposes.

<u>No.</u>	Description	Qty	Unit	Unit Price	Total
1.	Pressure Clean, repair/patch, exterior of exposed pre-cast concrete panels at the MS/RO Operations Building per attached plans.	1	LS		
2.	Removal of existing caulking/sealant from the exterior joints, seams, and cracks at the MS/RO Operations Building. Supply and provide Sikaflex – 2c NS EX Mix in all exterior joints seams and cracks at the MS/RO Operations Building per attached plans and				
	specifications.	1	LS		
BASE PROJ	BID TOTAL FOR COMPLETE				

TOTAL BASE BID IN WRITING

# "Pricing Page Sheet 2 of 2" (revised 2/3/14)

### **Bid Alternate**

A.	Additional cost to provide and apply Evonik Industries Protectosil CIT to the exterior of the exposed concrete panels of the MS/RO Operations Building per attached plans and specifications.			
		1	LS	 ·
В.	Additional cost to surface preparation and re-painting of the exterior of the exterior louvers and the exterior of the five exterior man doors to match existing.	1	LS	

It is the City of Hollywood's intent to award this project to the lowest responsive and responsible bidder for the "Total Base Bid" plus any City selected "Bid Alternates".

### NOTES:

- 1. REFER TO MANUFACTURE PRODUCT DATA SHEET AND SCOPE OF WORK FOR ADDITIONAL DESCRIPTION OF ITEMS.
- 2. THE CONTRACTOR SHALL BE SELECTED BASED UPON THE TOTAL BASE BID FOR ITEMS 1 THROUGH 2 PLUS ANY SELECTED BID ALTERNATE ITEMS.

Contractor Name: \_\_\_\_\_



1621 N. 14<sup>th</sup> Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

Item 2

**Pre-Bid Meeting Minutes & Attendance Record** 



CITY OF HOLLYWOOD Department of Public Utilities Engineering & Construction Services Division

# MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant

# Pre-Bid Conference Meeting Minutes Thursday, January 30, 2014

### ATTENDANCE:

### 1. Introduction

All attendees signed the attached sign-in sheet.

Engineering & Construction Services Division (ECSD) will provide field administration during construction. The Project Manager (PM) for this project representing the City will be:

Leslie Pettit (Engineer Registered) lpettit@hollywoodfl.org Cell Ph. 954-651-0892 Office: 954-921-3995 1621 N. 14<sup>th</sup> Avenue, Hollywood, Florida 33020

### 2. Scope of Project

This construction work consists of cleaning exterior of precast panels and vents, surface preparation, replacement of crack/joint sealant on exterior, sealing exterior concrete walls, and painting louvers at the MS/RO Operation Building at the Water Treatment Plant. The Engineer's cost estimate for the construction of this project is \$30,000.00 to \$100,000.00.

# 3. Design and Specs Comments/Highlights/Concerns

The major items discussed included the following:

- All questions concerning this project will be emailed to <u>lpettit@hollywoodfl.org</u> by January 31, 2014 at noon. The addendum will include a response to any written questions.
- An addendum is scheduled to be issued late in the day on Monday, February 3, 2014 with bids due on Tuesday, February 11, 2014 at City Hall, 2<sup>nd</sup> Floor, City Clerk's Office, 2600 Hollywood Boulevard, Hollywood, FL 33020
- The addendum will include the Sherwin Williams specifications for painting and surface preparation of the exterior of the louvers. A copy of the painting specification was provided to each meeting attendee.
- The parking on-site will be available for use by the contractor.

- Contractor to submit plan for protection of 1<sup>st</sup> Floor roof for approval by City.
- Joints/Cracks with sealant removed shall have new sealant installed by the contractor prior to leaving the site at the end of the shift. This is required to ensure that moisture does not enter the building potentially damaging the expensive water treatment and electrical equipment in this building.
- Inspections will be performed by the City's NACE Inspector and Engineering Construction Services Division (ECSD) inspectors.
- The inspector must approve the joint/crack sealant removal and cleaning prior to contractor application of new sealant in the joints/cracks.
- The inspector must approve surface preparation of the aluminum louvers prior to louver painting.
- The inspector must approve the cleaning of the concrete exterior wall prior to application of conduit sealant/corrosion protection coating.
- This project includes patching of damaged pre-cast concrete panels.
- Removal of conduits, piping, and roof drains will not be required for sealing the pre-cast panel walls.
- Building Interior coatings are not included in this project.
- The Contractor will be required to provide barricades and sidewalk closed signs to protect the public when working in the City roadway right-of-way on the first floor on the east side wall of the MS/RO Operations Building. The Contractor shall submit a sidewalk closure MOT plan for approval by the City.
- Clarification of Joint Crack Sealant Replacement: All exterior precast panel cracks/joints sealant will be replaced including the locations:
  - a. Joints between pre-cast wall panels.
  - b. Joints between all louvers and windows and precast wall panels.
  - c. Joints between all doors (man doors & roll-up doors) and precast wall panels.
  - d. Joint between the concrete wall panels and concrete at bottom of panels on the 1<sup>st</sup> Floor.
  - e. Joints at the top of the roof drains between the metal drain and the wall of the pre-cast panels. (Approximately 18" long on each side at the top of each roof drain).

Following this meeting bidders visited the site and observed the existing site conditions and took measurement as required for bid preparation.

MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant

Date: 01/30/2014

Project No.: 14-5108

Subject: PRE BID MEETING

# NAME	ORGANIZATION & ADDRESS	PHONE & EMAIL	SIGNATURE
Lee Louissant	<i>[#</i>	205 691-921 2 mary C h D. Contracting Com	Ň
Norge Arnaiz	Zestare Construction Group, INC. 954-985-5353 2411 S.W. SBth terrace norgeoDrestore Which Park CL 22023	954-985-5353 - norgeo@restore	Hays amus
Frank Santas	West AL Moint Inc. 253 Alcher Dr. Mamma I. 24321	513-843-0641 Frank S	Event Scents
AXEL PAINTING, TWG. INCORDORATED.	Commercial & Residential Paintine & RESTORATION SEL N.W. 21 AVE MAMI, FL. 3314	(786) 553-2259 (786) 553-5021 alex floring 8 86)250 winmari ext. WT AI EV	TH. WET AND Share I CO
	1521	2144 - 631-09 32	at 6 L. But
Ranky gensey	Sherwin - williams	954 868-4949	
Jesse Curtis	Schnell Contractors SOOS N Coolidge Ave	813-817-8411 (1=x)	
	Tampe Fr 3361c/	Teurts (2) schnellcontactors. Com	ctors.com

Page 1 of 3

CITY OF HOLLYWOOD ENGINEERING & CONSTRUCTION SERVICES DIVISION MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant

Date: 01/30/2014

Project No.: 14-5108

Subject: PRE BID MEETING

NAME	<b>ORGANIZATION &amp; ADDRESS</b>	PHONE & EMAIL	SIGNATURE
Whike Goodwin	HANCTZEIL Painting	934-658-0515 My Hartzell.Com mgoodwin Omy Hartzell.Com	
JUAN OETEGA	Casterezine Specialists, Inc	954-486-2332	1 cg
	Southedet	954 - 551 - 5744	n and a sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-
		JOICTEGA CONTRACTING SPECIMENTS . CONT	incid R . cort
PETE SAMARTON	PETE SAMARTZIS HARRY'S PAINTING & ENTERPR 727 8481950	0561878 135	() ()
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Cary Shimku	Exect Coults My Wederstocking INC 954-922-5630	954-922-5630	
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CITY OF HOLLYWOOD ENGINEERING & CONSTRUCTION SERVICES DIVISION

# MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant

Project No.: 14-5108

Subject: PRE BID MEETING

SIGNATURE	all a second						
PHONE & EMAIL	6-5-6-5- 878 (m.S.)						
<b>ORGANIZATION &amp; ADDRESS</b>	Shewin terllom						
NAME	Red Space						
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1621 N. 14<sup>th</sup> Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

Item 4 Revised Louver & Door Painting Specifications



# PAINT SPECIFICATIONS

# FOR THE

# CITY OF HOLLYWOOD WATER PLANT

Manhane Softening - Reverse Camous Building

2446 PlaDrinson Contevend Failtymana, PF - 22021 7964, 307-4220



Bob Spano Protective Coatings Representative 954 868-4953

RTHTN'N

Randy Guidry Professional Coatings Representative 954 868-4949



# SHERWIN-WILLIAMS PAINTING SPECIFICATIONS FOR THE CITY OF HOLLYWOOD WATER PLANT



# **GENERAL CONDITIONS**

### **SCOPE OF WORK:**

Please read these specifications carefully. This specification covers the pressure cleaning, surface preparation, and repainting of the louvers on the MS/RO Building at the City of Hollywood Water Plant. It includes all painted louvers and sills of the MS/RO Building.

### SURFACE PREPARATION:

Proper surface preparation is the responsibility of the Contractor. Surfaces shall be prepared in accordance with methods accepted as industry standards. The following is a set of recommendations necessary to achieve the proper surface of the substrate to allow for the long-term adhesion of the specified coatings. Test applications of each

coating are the responsibility of the contractor, to ensure compatibility with the substrate, adhesion and other characteristics of the new coating, as well as any previous coatings. As new coatings dry, the surface tension created by the curing process can cause peeling if there is insufficient adhesion of any of the underlying paint films. Certain colors and/or materials may require more than one coat to properly cover the existing substrate color, and allowances must be made for this and coverage determined prior to the beginning of the job. Adhesion tests should be performed by the Contractor prior to submitting the bid in order to anticipate poor adhesion of underlying paint films.

Maintenance painting will frequently not permit or require complete removal of all old coatings prior to repainting. However, all surface contamination such as loose paint, oxidation areas, foreign matter,



must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be clean and dull before repainting. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Glossy surfaces should be dulled by manual or mechanical means, prior to the application of any of the methods listed below. The use of chemicals to dull existing gloss is discouraged. If they are used, compatibility testing must be done by the Contractor to ensure against failures of the new coating related to such use. After the surface has been sufficiently dulled, completely clean the surface of all contaminates.

Coating performance is affected by proper surface preparation and application. Coating integrity and service life will be reduced because of improperly prepared surfaces. As high as 80% of all coatings failures can be directly attributed to inadequate surface preparation that affects coating adhesion. Selection and implementation of proper surface preparation ensures coating adhesion to the substrate and prolongs the service life of the coating system. No exterior painting should be done immediately after a rain, during foggy weather, when rain is predicted, or when the temperature is below 50°F.

Always check color for proper match. If the color does not match, do not continue. Minor shade variations may occur from batch to batch (refer to the batch number on the bucket). Avoid installing separate batches side-by-side to insure the best color matching. Sherwin-Williams will not be responsible for shade or color variation from batch to batch, if within product standards.

# NATIONAL STANDARDS

This Commentary is not part of any actual standard, but is included to provide a better understanding of the SSPC Surface Preparation (SP) and Abrasive (AB) standards, and other surface preparation documents

**SSPC-SP COM** is one of the complete collection of SSPC standards, guides, and specifications that can be viewed in the latest edition of Systems and Specifications, SSPC Painting Manual, Volume 2, available through the SSPC.

### SSPC-SP 1, Solvent Cleaning

November Editorial Revisions November 1, 2004

1,

1982

This specification covers the requirements for the solvent cleaning of steel surfaces.

Solvent cleaning is a method for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants from steel surfaces.

It is intended that solvent cleaning be used prior to the application of paint, and in conjunction with surface preparation methods specified for the removal of rust, mill scale, or paint.

SHERWIN-WILLIAMS PAINT SPECIFICATIONS FOR CITY OF HOLLYWOOD WATER PLANT - 01/28/14 - PAGE 3

### SSPC-SP 2, Hand Tool Cleaning

### November 1, 1982 Editorial Revisions November 1, 2004

This standard covers the requirements for hand tool cleaning steel surfaces.

Hand tool cleaning is a method of preparing steel surfaces by the use of non-power hand tools.

Hand tool cleaning removes all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Mill scale, rust, and paint are considered adherent if they cannot be removed by lifting with a dull putty knife.

### SSPC-SP 3, Power Tool Cleaning

November 1, 1982 Editorial Revisions November 1, 2004

This specification covers the requirements for power tool cleaning of steel surfaces.

Power tool cleaning is a method of preparing steel surfaces by the use of power assisted hand tools.

Power tool cleaning removes all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Mill scale, rust, and paint are considered adherent if they cannot be removed by lifting with a dull putty knife.

### SSPC-SP 11, Power Tool Cleaning to Bare Metal

November 1, 1987 Editorial Revisions November 1, 2004

This standard covers the requirements for power tool cleaning to produce a bare metal surface and to retain or produce a minimum 25 micrometer (1.0 mil) surface profile.

This standard is suitable where a roughened, clean, bare metal surface is required, but where abrasive blasting is not feasible or permissible.

SHERWIN-WILLIAMS PAINT SPECIFICATIONS FOR CITY OF HOLLYWOOD WATER PLANT - 01/28/14 - PAGE 4

### SHERWIN-WILLIAMS PAINTS

This standard differs from SSPC-SP 3, Power Tool Cleaning, in that SSPC-SP 3 requires only the removal of loosely adherent materials, and does not require producing or retaining a surface profile.

This standard differs from SSPC-SP 15, Commercial Grade Power Tool Cleaning, in that SSPC-SP 15 allows stains of rust, paint, or mill scale to remain on the surface. SSPC-SP 11 only allows materials to remain at the bottom of pits.

### SSPC-SP 13/NACE No. 6, Surface Preparation of Concrete

### Approved 1997 Reaffirmed March 17, 2003

This standard gives requirements for surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems.

The requirements of this standard are applicable to all types of cementitious surfaces including cast-in-place concrete floors and walls, precast slabs, masonry walls, and shotcrete surfaces.

An acceptable prepared concrete surface should be free of contaminants, laitance, loosely adhering concrete, and dust, and should provide a sound, uniform substrate suitable for the application of protective coating or lining systems.

When required, a minimum concrete surface strength, maximum surface moisture content, and surface profile range should be specified in the procurement documents (project specifications).

### SSPC-SP 15, Commercial Grade Power Tool Cleaning

### May 1, 2002 Editorial Revisions November 1, 2004

This standard covers the requirements for power tool cleaning to provide a commercial grade power tool cleaned steel surface, and to retain or produce a minimum 25 micrometer (1.0 mil) surface profile.

A commercial grade power tool cleaned steel surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, rust, coating, oxides, mill scale, corrosion products, and other foreign matter, except as noted.

SHER WIN-WILLIAMS PAINT SPECIFICATIONS FOR CITY OF HOLLYWOOD WATER PLANT - 01/28/14 - PAGE 5

Random staining shall be limited to no more than 33 percent of each unit area of surface as defined. Staining may consist of light shadows, slight streaks, or minor discolorations caused by stains of rust, stains of mill scale, or stains of previously applied coating. Slight residues of rust and paint may also be left in the bottoms of pits if the original surface is pitted.

This standard differs from SSPC-SP 3, Power Tool Cleaning, in that a higher degree of surface cleanliness is required, and a minimum surface profile of 25 micrometers (1.0 mil) will be retained or produced.

# **COATINGS AND APPLICATIONS:**

### LOUVER SURFACES:

Pressure clean all of the surfaces to be painted and resealed with a minimum 3500 psi pressure cleaning system. The use of a zero degree spinning tip (Waterblaster tip as an example) is required. The removal of areas at the top of each louver, and other surface areas, must be



brought down to bare metal. Sand injection pressure cleaning is required for this. If the contractor chooses not to use sand injection, then SSPC-SP 3, Power Tool Cleaning, or SSPC-SP 11, Power Tool Cleaning to Bare Metal standards will be used.

All louver and surfaces to be sealed must be cleaned per SSPC-SP1. All sills shall be treated exactly as specified for louvers.

Containment tarps must be used on the interior of the louver openings to

contain the water and debris. It must be contained and dropped vertically to the floor for cleanup. No water or debris will be allowed to get into the air on the interior of the building.

After all surfaces to be painted are clean and dry, with no surface chalk, apply Sherwin-Williams DTM Wash Primer, (B71Y1), at a wet film thickness of 3.4 - 6.4 mils to dry to .7 - 1.3 mils dry film thickness. Do not reduce.

After a minimum of four hours, apply Sherwin-Williams Water Based Acrolon  $100^{\text{@}}$  Water Based Polyurethane, (B65-700 Series), at a wet film thickness of 4.0 - 8.0 mils to dry to 2.0 - 4.0 mils dry film thickness. The color is to be Selected by the Owner.

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### SUBMITTALS:

Proper application is the responsibility of the Owner. Field visits by Sherwin-Williams



personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

Owner is to be supplied with applicable Sherwin-Williams Color Answer Color Decks, if necessary. The Contractor is responsible for obtaining and following all instructions and specifications on the appropriate Sherwin-Williams Data, and Product Information Pages, as well as the Sherwin-Williams Application Bulletins for each product used. No deviation from

these published standards will be allowed, unless approved in writing from an authorized Sherwin-Williams representative. All manufacturers' data specification sheets for materials used on the job shall be provided to the Owner's representative, as well as a sample warranty and general maintenance information, if requested.



SHERWIN-WILLIAMS PAINT SPECIFICATIONS FOR CITY OF HOLLYWOOD WATER PLANT - 01/28/14 - PAGE 7



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

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

24 months, unopened

100°F (38°C)

Water

Store indoors at 40°F (4.5°C) to

>230°F (110°C) Seta, catalyzed

Water, 5-15% minimum reduction required for brush and roll

Shelf Life:

Flash Point:

**Reducer:** 

Clean Up:

Pencil Hardness

**Resistance** (Zinc

Clad IV, 2 coats of

Salt Fog

Waterbased

Acrolon 100)

**Thermal Shock** 

**ASTM D3363** 

hours

cycles

light colors. Dark colors may require a clear coat.

ASTM B117, 4,000

ASTM D2246, 10

Meets the requirements of SSPC Paint No. 36, Level 3 for white and

continued on back

Rating 9 per ASTM

D610 for rusting

3H

Passes

### Protective WATERBASED ACROLON 100 & WATERBASED URETHANE Marine PART A B65T724 CLEAR BASE PART A B65B720 BLACK PART A B65W721 EXTRA WHITE BASE Coatings PART A B65R720 SAFETY RED PART A B65WW725 MR, EXTRA WHITE BASE PART A B65Y720 SAFETY YELLOW

**PRODUCT** INFORMATION

5.31

HARDENER

B65V720

PART B

Recommended S	VSTEMS		SURFACE PREPARATION
	Dry Film	Thickness / ct.	Surface must be clean, dry, and in sound condition. Remove all oil,
Steel:	<u>Mils</u>	(Microns)	dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.
1 ct. Procryl Universal Primer 1-2 cts. Waterbased Acrolon100	2.0-4.0 2.0-4.0	(50-100) (50-100)	Refer to product Application Bulletin for detailed surface prepara-
Steel:			tion information.
1 ct. Zinc Clad III HS-100 1 ct. Macropoxy 646-100	3.0-5.0 4.0-6.0	(75-125) (100-150)	Minimum recommended surface preparation:
1-2 cts. Waterbased Acrolon100	2.0-4.0	(50-100)	Iron & Steel: SSPC-SP6/NACE 3     Aluminum: SSPC-SP1
Steel:			* Galvanizing: SSPC-SP1
1 ct. Zinc-Clad VI WB Primer 1 ct. Waterbased Tile-Clad Primer	2.0-3.0	(50-75) (50-100)	* Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP1-3
1 ct. Waterbased Tile-Clad Primer 1-2 cts. Waterbased Acrolon100	2.0-4.0 2.0-4.0	(50-100)	* Requires primer
Steel:		2.55	Do not used hydrocarbon solvents for cleaning Surface Preparation Standards
1 ct. Zinc-Clad VI WB Primer	2.0-3.0	(50-75)	Condition of ISO 8501-1 Swedish Std.
1-2 cts. Waterbased Acrolon100	2.0-4.0	(50-100)	White Motel Se 2 Se 2 SD 5 1
Steel:	2240	(75.400)	White Metal     Sa 2.5     Sa 2.5     Sp 10     2       Near White Metal     Sa 2.5     Sa 2.5     Sp 10     2       Commercial Blast     Sa 2.5     Sa 2.5     Sp 10     2       Brush-Off Blast     Sa 2     Sa 2.5     Sp 10     2       Hand Tool Cleaning     Pitted & Rusted     St 2     C St 2     Sp 2       Power Tool Cleaning     Rusted     C St 3     C St 3     Sp 3
ct. Zinc-Clad IV Primer -2 cts. Waterbased Acrolon100	3.0-4.0 2.0-4.0	(75-100) (50-100)	Hand Tool Cleaning Rusted CSt 2 CSt 2 SP 2 - Pitted & Rusted D St 2 D St 2 SP 2 - Power Tool Cleaning Pitted & Rusted D St 3 D St 3 SP 3 -
Steel:		(/	Power Tool Cleaning Rusted C St 3 C St 3 SP 3 -
1 ct. Epolon II Rust-Inhibiting Primer 1-2 cts.Waterbased Acrolon100	2.0-4.0	(50-100)	TINTING
-2 cts. Waterbased Acrolon100	2.0-4.0	(50-100)	Tint Part A with CCE or EnviroToner Colorants. Use the 100% tint
Steel:		102221 012 212	strength formula pages. Five minutes minimum mixing on a
<ol> <li>Pro Industrial WB Catalyzed Epoxy</li> <li>t. Waterbased Acrolon100</li> </ol>	2.0-4.0	(50-100) (50-100)	mechanical shaker is required for complete mixing of color.
	2.0 1.0	(00 100)	APPLICATION CONDITIONS
Galvanizing: I ct. DTM Wash Primer	0.7-1.3	(18-32)	Temperature:55°F (13°C) minimum, 120°F (49°C)
<ul> <li>-2 cts. Waterbased Acrolon100</li> </ul>	2.0-4.0	(50-100)	maximum (air, surface, and material)
Aluminum:			At least 5°F (2.8°C) above dew point
ct. DTM Wash Primer	0.7-1.3	(18-32)	Relative humidity: 85% maximum
1-2 cts.Waterbased Acrolon100 2.0-4.0 (50-100)			Refer to product Application Bulletin for detailed application infor-
Pre-Finished Siding (Fluorocarbon, S Polyester Polymers):	ilicone P	olyester, and	mation.
Lt. Bond-Plex WB Acrylic -2 cts. Waterbased Acrolon100	2.0-4.0 2.0-4.0	(50-100) (50-100)	Ordering Information
		(50-100)	Packaging: Part A: 1 gallon (3.78L), 4 gallon (15.1L) in a
Concrete/Masonry (High Performance I ct. Kem Cati-Coat HS Epoxy	e): 10.0-20.0 (250-500)		5 gallon (18.9L) pail
Filler/Sealer			Part B: 1 quart (0.94L), 1 gallon (3.78L) (premeasured components)
-2 cts. Waterbased Acrolon100	2.0-4.0	(50-100)	(premeasured components)
Concrete/Masonry:	100400	(250 450)	Weight: 10.3 ± 0.2 lb/gal ; 1.24 Kg/L, catalyzed
l ct. Heavy Duty Block Filler I-2 cts. Waterbased Acrolon100	2.0-4.0	) (250-450) (50-100)	SAFETY PRECAUTIONS
			Refer to the MSDS sheet before use.
			Published technical data and instructions are subject to change without notice.
The systems listed above are representation	ative of the	e product's use,	Contact your Sherwin-Williams representative for additional technical data and instructions.
other systems may be appropriate.			WARRANTY
Disclaimer			The Sherwin-Williams Company warrants our products to be free of manufactur-
The information and recommendations set forth pased upon tests conducted by or on behalf of Th Such information and recommendations set forth serlain to the product offered at the time of publi Milliams representative to obtain the most recent	erein are sul cation. Con	Williams Company. oject to change and isult your Sherwin-	ing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defec- tive 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 MER-
Application Bulletin.			CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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### 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 Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

### Aluminum

Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required

### **Galvanized Steel**

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. 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. Primer required.

### **Concrete and Masonry**

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

### Pre-Finished Siding:

(Fluorocarbon, Silicone Polyester, and Polyester Polymers) Remove oil, grease, dirt, oxides, and other contaminants from the surface by cleaning per SSPC-SP1 or water blasting per NACE Standard RP-01-72 (caution: excessive blasting pressure may cause warping, use caution). Always check for compatibility of the previously painted surface with the new coating by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS065900	SSPC	NACE
White Metal Near White Metal		Sa 3	Sa 3	SP 5	1
Commercial Blast		Sa 2.5 Sa 2	Sa 2.5 Sa 2	SP 10	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	
riana raor oroanng	Pitted & Rusted	DSI2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	
- ener rest oldaring	Pilled & Rusted	D S13	D St 3	SP 3	(m)

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, 5-15% minimum reduction
	required for brush and roll

Clean Up ......Water

### **Airless Spray**

Unit	
Pressure	
Hose	
Tip	
Filter	60 mesh
Reduction	As needed, up to 15% by volume

### **Conventional Spray**

Gun	DeVilbiss JGA
Fluid Tip	E
Air Nozzle	
Atomization Pressure	45-55 psi
Fluid Pressure	10-20 psi
Reduction	As needed, up to 15% by volume

### Brush

Brush.....Nylon/Polyester

# Reduction.....As needed, up to 15% by volume

### Roller

Cover	.3/8	" woven	with solvent resistant core
Reduction	.As	needed,	, up to 15% by volume

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



A	PPLICATION	Procedures		PERFORMANCE TIPS	
Surface preparat	tion must be co	ompleted as ind	licated.	Stripe coat crevices, welds, and sharp angles to prevent early failure in these areas.	
Mix Components use. Make certai can. Then comb volume of Part B Reduce 5% - 15 application.	in no pigment ine 4 parts by B. Mix thoroug	remains on the volume of Part ghly with low s	e bottom of the A with 1 part by peed agitation.	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 po- rosity of the surface, skill and technique of the applicator, method	
Apply paint at the rate as indicated	e recommende below:	ed film thickness	and spreading	rosity 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.	
Recomm	nended Spre	ading Rate pe Minimum			
Wet mils (microns)4.0 (100)8.0 (200)Dry mils (microns)2.0 (50)4.0 (100)~Coverage sq ft/gal (m²/L)195 (4.8)390 (9.5)Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft776 (19.0)NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.			<b>4.0</b> (100) <b>390</b> (9.5)	Reduction over 15% of material can affect film build, appearance and adhesion. Do not mix previously catalyzed material with new. Do not apply the material beyond recommended pot life.	
achieve maximi	im film thicknes	s and uniformity o	f appearance.	In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with water.	
Drying Sch	edule @ 5.0 i	mils wet (125	microns):		
	@ 55°F/13°C	@ 77°F/25°C 50% RH	@ 120°F/49°C		
To touch: To handle: To recoat:	3 hours 12 hours	1.5 hours 6 hours	45 minutes 2 hours		
minimum: maximum: To cure:	16 hours 3 months 14 days	8 hours 3 months 10 days	2-4 hours 3 months 2 days		
Pot Life: Sweat-in-Time: If maximum recoat Drying time is term					
Application of co recommended sp performance.	oating above preading rate	maximum or b may adversely	elow minimum affect coating	Refer to Product Information sheet for additional performance characteristics and properties.	
				SAFETY PRECAUTIONS	
				Refer to the MSDS sheet before use.	
CLEAN UP INSTRUCTIONS Clean spills and spatters immediately with water. Clean tools immediately after use with water. Follow manufacturer's safety				Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.	
recommendations				WARRANTY	
	Discl	AIMER		The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures.	
The information and re based upon tests cond Such information and re pertain to the product Williams representative Application Bulletin.	ducted by or on be recommendations s offered at the time	half of The Sherwin set forth herein are su e of publication. Co	Williams Company. ubject to change and insult your Sherwin-	Liability for products proven defective, if any, is limited to replacement of the de- fective 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 MER- CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.	



Test Name	Test Method	Results		
Adhesion	ASTM D3359	5B		
Direct Impact	ASTM D2794	160 in. lbs.		
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes		
Pencil Hardness	ASTM D3363	F		

~Coverage sq ft/gal (m²/L) 250 (6.1)

VOC (EPA Method 24):

Wet mils (microns)

Dry mils (microns)

 

 Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft
 336 (8.2)

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

Recommended Spreading Rate per coat:

<100 g/L; .83 lb/gal

Minimum

3.4 (85)

0.7 (18)

Maximum

6.4 (160)

470 (11.5)

1.3 (32)

Drying Sc	hedule @ 6.0	mils wet (150	microns):
	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 110°F/43°C
To touch:	3 hours	2 hours	1 hour
To handle:	3 hours	2 hours	1 hour
To recoat:	8 hours	2 hours	1 hour
To cure: Drying time is te	7 days mperature, humid	5 days lity, and film thickr	3 days ness dependent.
Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)		
Flash Point:		>200°F (93°C),	PMCC, mixed
Reducer:		Not Recommer	
Clean Up:		Water	

### www.sherwin-williams.com/protective

# **DTM WASH PRIMER**

Protective & Marine Coatings

M

# B71Y1

# **PRODUCT INFORMATION**

1.20

Recommended Systems			SURFACE PREPARATION	
Dry Film Thickness / ct.				
Aluminum:	Mils	(Microns)	Surface must be clean, dry, and in sound condition. Remove a	
1 ct. DTM Wash Primer	0.7-1.3	(18-32)	oil, dust, grease, dirt, loose rust, and other foreign material t ensure adequate adhesion.	
2 cts. DTM Acrylic Coating	2.5-4.0	(63-100)	Do not use hydrocarbon solvents for cleaning.	
		(/		
Galvanizing:		(10.00)	Refer to product Application Bulletin for detailed surface preparation information.	
1 ct. DTM Wash Primer 2 cts. DTM Acrylic Coating	0.7-1.3 2.5-4.0	(18-32)	lion mornation.	
2 cts. DTM Acrylic Coating	2.5-4.0	(63-100)	Minimum recommended surface preparation:	
Steel:			Aluminum: SSPC-SP1	
1 ct. Zinc Clad Primer	3.0-5.0	(75-125)	Galvanizing: SSPC-SP1 Zinc Rich Coatings: SSPC-SP1	
1 ct. DTM Wash Primer	0.7-1.3	(18-32)	Stainless Steel SSPC-SP1	
2 cts. DTM Acrylic Coating	2.5-4.0	(63-100)		
Stainless Steel:			Surface Preparation Standards Condition of ISO 8501-1 Swedish Std.	
1 ct. DTM Wash Primer	0.7-1.3	(18-32)	Surface BS7079:A1 SIS055900 SSPC NACE	
2 cts. DTM Acrylic Coating	2.5-4.0	(63-100)	Near White Motol Sa 2.6 Sa 2.6 SD 10 2	
,		(00 100)	Commercial Blast Sa 2 Sa 2 SP 6 3 Brush-Off Blast Sa 1 SP 7 4 Hand Tool Cleaning Rusted CS1 2 CS1 2 SP 2 - Pitted & Rusted DS1 2 DS1 2 SP 2 - Power Tool Cleaning Pitted & Rusted DS1 3 DS1 3 SP 3 -	
Other Acceptable Topcoats:			Power Tool Cleaning Pitted & Rusted D St 2 D St 2 SP 2 - Power Tool Cleaning Pitted & Rusted D St 3 D St 3 SP 3 - Pitted & Rusted D St 3 D St 3 SP 3 -	
Acrolon 218 HS Polyurethane			Power root cleaning Pitted & Rusted D St 3 D St 3 SP 3 -	
Fast Clad DTM Urethane Hi-Solids Polyurethane			TINTING	
Hydrogloss			Do not tint.	
Industrial Enamel HS				
Macropoxy HS Epoxy Metalatex Semi-Gloss Enamel			APPLICATION CONDITIONS	
Pro Industrial 0 VOC Acrylic			Temperature:50°F (10°C) minimum, 110°F (43°C)	
Sher-Cryl HPA Sherthane 2K Urethane			(air, surface, and material)	
Tile-Clad HS Epoxy			At least 5°F (2.8°C) above dew point	
Waterbased Tile Clad Epoxy	1		Relative humidity: 85% maximum	
Waterbased Industrial Enam			Refer to product Application Bulletin for detailed application	
			information.	
The systems listed above are representative of the product's use,		product's use,	Ordering Information	
other systems may be appropriate.			Packaging: 1 (3.78L) and 5 (18.9L) gallon container	
			Weight per gallon: 9.23 ± 0.2 lb 1.1Kg/L	
			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 an instructions.	
DISCLAIME			The Sherwin-Williams Company warrants our products to be free of manufactu	
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.			ing defects in accord with applicable Sherwin-Williams quality control procedures: Liability for products proven defective, if any, is limited to replacement of the defect tive product or the refund of the purchase price paid for the defective product a determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED STATUTORY, BY OPERATION OF LAW OR OTHERWISE. INCLUDING MEF	
	110	nu oboquia utillia	CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.	

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# **DTM WASH PRIMER**

### B71Y1

Revised: January 11, 2013

# **APPLICATION BULLETIN**

SURFACE PREPARATIONS	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:       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
Do not use hydrocarbon solvents for cleaning.	
Aluminum Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Galvanized Steel Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. 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 with Procryl Primer. Zinc Rich Coatings Remove all oil, dust, grease, dirt, loose rust, and other foreign material by cleaning per SSPC-SP1 or water blast per NACE Standard RP-01-72. For weathered zinc coatings, remove zinc salts by either high pressure water washing and scrubbing with a stiff bristle brush or sweep blast followed by a water flush. Allow to dry thoroughly before coating. Stainless Steel	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       Not recommended         Clean Up       Water         Airless Spray       Pressure         Pressure       1500 psi         Hose       1/4" ID         Tip       015"017"         Filter       80 mesh         Conventional Spray       Gun         Gun       Binks 95         Fluid Nozzle       66         Air Nozzle       63PB         Atomization Pressure       50 psi         Fluid Pressure       50 psi
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1.	Brush Not recommended except for touch-up work.
	Roller Not recommended except for touch-up work.
	If specific application equipment is not listed above, equivalent equipment may be substituted.
Surface Preparation Standards           Condition of ISO 8501-1 Swedish Std.           Surface BS7079:A1 SIS055900 SSPC NACE           Sa 3         Sa 3         SP 5         1           White Metai         Sa 2         Sa 2         SP 5         1           Commercial Blast         Sa 2.5         Sa 2.5         Sa 2.5         Sp 10         2           Commercial Blast         Sa 2.5         Sa 2.5         Sa 2.5         Sp 2         2           Gamercial Blast         Sa 2.1         Sa 2.5         Sp 2         2         Sp 2         -           Hand Tool Cleaning         Rusted         C St 2         C St 2         Sp 2         -         -           Power Tool Cleaning         Pitted & Rusted         D St 3         C St 3         Sp 3         -	

<sup>1.20</sup>


# **DTM WASH PRIMER**

B71Y1

### APPLICATION BULLETIN 1.20 **APPLICATION PROCEDURES** PERFORMANCE TIPS When using spray application, use a 50% overlap with each pass Surface preparation must be completed as indicated. of the gun to avoid holidays, bare areas, and pinholes. If necessary, Mixing Instructions: Mix paint thoroughly by boxing and stirring cross spray at a right angle. before use. Avoid unnecessary entrapment of air. Mix with a power mixer at low speed. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or po-Apply paint at the recommended film thickness and spreading rosity of the surface, skill and technique of the applicator, method rate as indicated below: of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive Recommended Spreading Rate per coat: film build. Minimum Maximum Wet mils (microns) 3.4 (85) 6.4 (160) Flush equipment thoroughly with water before using. Dry mils (microns) 0.7 (18) 1.3 (32) ~Coverage sq ft/gal (m²/L) 250 (6.1) 470 (11.5) Do not apply to rusty galvanizing. Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft 336 (8.2) Do not reduce. NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance. Must be topcoated. Drying Schedule @ 6.0 mils wet (150 microns): Do not use hydrocarbon solvents for cleaning. @ 50°F/10°C @ 77°F/25°C @ 110°F/43°C 50% RH To touch: 3 hours 2 hours 1 hour To handle: 3 hours 2 hours 1 hour To recoat: 8 hours 2 hours 1 hour To cure: 7 days 5 days 3 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. Refer to Product Information sheet for additional performance characteristics and properties. SAFETY PRECAUTIONS Refer to the MSDS sheet before use. **CLEAN UP INSTRUCTIONS** Clean spills and spatters immediately with soap and warm water. Published technical data and instructions are subject to change without notice. Clean hands and tools immediately after use with soap and warm Contact your Sherwin-Williams representative for additional technical data and water. After cleaning, flush spray equipment with Mineral Spirits instructions to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits. WARRANTY The Sherwin-Williams Company warrants our products to be free of manufacturing DISCLAIMER defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the de-The information and recommendations set forth in this Product Data Sheet are fective product or the refund of the purchase price paid for the defective product based upon tests conducted by or on behalf of The Sherwin-Williams Company. as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE Such information and recommendations set forth herein are subject to change and OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED. pertain to the product offered at the time of publication. Consult your Sherwin-STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER-Williams representative to obtain the most recent Product Data Information and CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE Application Bulletin www.sherwin-williams.com/protective

# MATERIAL SAFETY DATA SHEET

B71Y1 14 00 DATE OF PREPARATION Mar 12, 2013

# SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER B71Y1 PRODUCT NAME DTM Wash Primer, Yellow/Green MANUFACTURER'S NAME THE SHERWIN-WILLIAMS COMPANY 101 Prospect Avenue N.W. Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
*for Chemical Emergency (	ONLY (spill, leak, fire, exposure, or accident)

# SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
1	111-76-2	2-Butoxyethanol		
		ACGIH TLV	20 PPM	0.88 mm
		OSHA PEL	25 PPM	
0.1	14808-60-7	Quartz		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
1	112926-00-8	Amorphous Precipitat	ed Silica	
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	6 mg/m3 as Dust	
10	14807-96-6	Talc		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	

# SECTION 3 — HAZARDS IDENTIFICATION

# ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

• the liver

· the urinary system

• the hematopoietic (blood-forming) system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

**HMIS Codes** 

Health 2\*

Flammability 0

Reactivity 0

# SECTION 4 — FIRST AID MEASURES

- EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- SKIN: Wash affected area thoroughly with soap and water.
- Remove contaminated clothing and launder before re-use.
- INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

# SECTION 5 — FIRE FIGHTING MEASURES

# FLASH POINT Not Applicable

LEL Not Applicable FLAMMABILITY CLASSIFICATION Not Applicable

Applicable EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

# UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

UEL

Not

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

# SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

# SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

# SECTION 7 — HANDLING AND STORAGE

## STORAGE CATEGORY

Not Applicable

# PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

# SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

## PRECAUTIONS TO BE TAKEN IN USE

### Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

# VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

## RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

# **PROTECTIVE GLOVES**

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

### EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

# SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT SPECIFIC GRAVITY	9.41 lb/gal 1127 g/l 1.13
BOILING POINT	212 - 343 °F 100 - 172 °C
MELTING POINT	Not Available
VOLATILE VOLUME	78%
EVAPORATION RATE	Slower than ether
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	
Hq	8.5
VOLATILE ORGANIC COMPOUNDS (VOC Th	eoretical - As Packaged)
0.81 lb/gal 98 g/l	Less Water and Federally Exempt Solvents
0.20 lb/gal 24 g/l	Emitted VOC

# SECTION 10 - STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID None known. INCOMPATIBILITY None known. HAZARDOUS DECOMPOSITION PRODUCTS By fire: Carbon Dioxide, Carbon Monoxide HAZARDOUS POLYMERIZATION

Will not occur

# SECTION 11 — TOXICOLOGICAL INFORMATION

# CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
111-76-2	2-Butoxyethanol			
	LC50 RAT	4HR	Not Available	
	LD50 RAT		470 mg/kg	
14808-60-7	Quartz			
	LC50 RAT	4HR	Not Available	
	LD50 RAT		Not Available	
112926-00-8	Amorphous Precipitated Silica			
	LC50 RAT	4HR	Not Available	
	LD50 RAT		Not Available	
14807-96-6	Talc			
	LC50 RAT	4HR	Not Available	
	LD50 RAT		Not Available	

# SECTION 12 - ECOLOGICAL INFORMATION

# ECOTOXICOLOGICAL INFORMATION

No data available.

# SECTION 13 — DISPOSAL CONSIDERATIONS

# WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

# SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT) Not Regulated for Transportation. Canada (TDG) Not Regulated for Transportation. IMO Not Regulated for Transportation. IATA/ICAO Not Regulated for Transportation.

# SECTION 15 - REGULATORY INFORMATION

# SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Zinc Compound	4	2.0
	Glycol Ethers	1	

**CALIFORNIA PROPOSITION 65** 

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

# **SECTION 16 — OTHER INFORMATION**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

B71Y1

# MATERIAL SAFETY DATA SHEET

B65R720 07 00 DATE OF PREPARATION Jul 25, 2013

# SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER B65R720 PRODUCT NAME Waterbased ACROLON® 100 HS Waterbased Urethane (Part A), Red MANUFACTURER'S NAME THE SHERWIN-WILLIAMS COMPANY 101 Prospect Avenue N.W. Cleveland, OH 44115

**Telephone Numbers and Websites** 

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
	DNLY (spill, leak, fire, exposure, accide

# SECTION 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
0.4	13463-67-7	Titanium Dioxide		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

# SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness. SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure. CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

# SECTION 4 - FIRST AID MEASURES

- EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- SKIN: Wash affected area thoroughly with soap and water.
- Remove contaminated clothing and launder before re-use.
- INHALATION: If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.

INGESTION: Do not induce vomiting. Get medical attention immediately.

HMIS Codes Health 1\* Flammability 0 Reactivity 0

# **SECTION 5 — FIRE FIGHTING MEASURES**

FLASH POINT > 200 °F PMCC UEL FLAMMABILITY CLASSIFICATION Not Not Applicable

Applicable

I FI

Not

Applicable EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

# SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

# SECTION 7 — HANDLING AND STORAGE

# STORAGE CATEGORY

DOL Storage Class IIIB

# PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

# SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

# PRECAUTIONS TO BE TAKEN IN USE

NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

# VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

# **RESPIRATORY PROTECTION**

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturers directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

# PROTECTIVE GLOVES

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2. EYE PROTECTION

# EYEPROTECTION

Wear safety spectacles with unperforated sideshields

OTHER PROTECTIVE EQUIPMENT

Use barrier cream on exposed skin.

# OTHER PRECAUTIONS

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

# SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT SPECIFIC GRAVITY	8.76 lb/gal 1049 g/l 1.05
BOILING POINT	212 - 213 °F 100 - 100 °C
MELTING POINT	Not Available
VOLATILE VOLUME	64%
EVAPORATION RATE	Slower than
	ether
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	Not Available
pH	7.0
VOLATILE ORGANIC COMPOUNDS (VOC The	eoretical - As Packaged)
0.32 lb/gal 38 g/l	Less Water and Federally Exempt Solvents
0.11 lb/gal 14 g/l	Emitted VOC

# SECTION 10 - STABILITY AND REACTIVITY

# STABILITY — Stable

CONDITIONS TO AVOID None known. INCOMPATIBILITY None known. HAZARDOUS DECOMPOSITION PRODUCTS By fire: Carbon Dioxide, Carbon Monoxide HAZARDOUS POLYMERIZATION

Will not occur

# SECTION 11 — TOXICOLOGICAL INFORMATION

# CHRONIC HEALTH HAZARDS

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

# TOXICOLOGY DATA

CAS No.	Ingredient Name				
13463-67-7	Titanium Dioxide		N WARNAM AND AND A STREET AND A S		
		LC50 RAT	4HR	Not Available	
		LD50 RAT		Not Available	

# SECTION 12 — ECOLOGICAL INFORMATION

# ECOTOXICOLOGICAL INFORMATION

No data available.

# SECTION 13 — DISPOSAL CONSIDERATIONS

# WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

# **SECTION 14 — TRANSPORT INFORMATION**

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

# B65R720

IATA/ICAO

Not Regulated for Transportation.

**CALIFORNIA PROPOSITION 65** 

# SECTION 15 - REGULATORY INFORMATION

# SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

 CAS No.
 CHEMICAL/COMPOUND
 % by WT

 No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
 %

% Element

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

# SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

DIAMOND COLD COAST THOMAN TO THE THE Submit Bids To:	CITY OF HOLLYWOOD, FLORIDA
City of Hollywood 2600 Hollywood Boulevard Hollywood, Florida 33020	INVITATION FOR BID
Office of City Clerk, Room 221	BIDDER ACKNOWLEDGMENT
Bid Title: MS/RO Operation Building Exterior Wall Sealant at Water Treatment Plant Bid No.: 14-5108	Bid must be received prior to 10:00 A.M., February 11, 2014 and may not be withdrawn within 60 calendar days after such date and time. Bids received by the date and time specified will be opened and read publicly at the Southern Regional Wastewater Treatment Plant Conference Room, 1621 N. 14 <sup>th</sup>
A Cone of Silence is in effect with respect to this Bid. The Cone of Silence prohibits certain communications between potential vendors and the City. For further information, please refer to Section 30.15(F) of the City's Code of Ordinances.	Avenue, Hollywood, Florida 33019, Building A, 1 <sup>st</sup> Floor at 10:30 A.M. on February 11, 2014. All Bids received after the specified date and time will be returned unopened. Project Manager: Leslie H. Pettit, P.E. Telephone No : (954) 921-3930

# BIDDER ACKNOWLEDGMENT

This form must be completed and submitted along with the complete bid document by the date and the time of bid opening. The bid summary sheet pages on which the bidder actually submits a bid and any pages upon which information is required must be completed and attached with all pages of the bid document.

Bidder's Name:	Fed. ID No. or SS
	Number
Complete	Telephone No.:
Mailing	Fax No.:
Address:	
Do You Have a Permanent Office Located in the City of	E-Mail Address:
Hollywood?	
Yes 🔲 No 🗌	
Indicate type of organization below:	
- 10	
Corporation 🔲 Partnership 🗌 Individual 🗌	
Other	

ATTENTION: FAILURE TO SIGN (<u>PREFERABLY IN BLUE INK</u>) OR COMPLETE ALL BID SUBMITTAL FORMS AND FAILURE TO SUBMIT ALL PAGES OF THE BID DOCUMENT AND ANY ADDENDUMS ISSUED MAY RENDER YOUR BID NON-RESPONSIVE.

# CHECK BOX BELOW TO ACKNOWLEDGE THIS BID.

The undersigned bidder certifies that this bid is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a bid for the same materials, supplies, services, or equipment, and is in all respects fair and without collusion or fraud. I certify acceptance of this bid's terms, conditions, specifications, attachments and addenda. Further, by checking the Agree box listed below (if submitting Bid online) and by signing below in blue ink (if submitting Bid via mail, etc.), pages 2 through 5 are acknowledged and accepted as well as any special instruction sheet(s) if applicable. I am authorized to bind performance of this bid for the above bidder.

Title

Agree 🗌

Authorized Name (Type or Print)

Date

Authorized Signature

Water Treatment Plant MS/RO Operations Bldg. Wall Sealant Replacement



# NOTICE OF IMPOSITION OF CONE OF SILENCE

On **January 17, 2014** the City of Hollywood, Florida Department of Public Utilities issued the following:

# Bid #14-5108 for the MS/RO Operation Building Exterior Wall Sealant at South Regional Water Treatment Plant.

<u>Project Scope</u>: The work performed consists of cleaning exterior surface, surface preparation, and replacement of existing crack sealant on exterior of the exposed concrete panel walls of the MS/RO Operations Building at the South Regional Water Treatment Plant, located at 3441 Hollywood Boulevard, Hollywood, Florida 33021.

Pursuant to Section 30.15(E) of the Code of Ordinances, a Cone of Silence has been imposed on the items set forth above. The Cone of Silence will continue until the City awards or approves a contract, votes to reject all bids or responses, or otherwise takes action which ends the solicitation. If the City Commission refers the item back to the City Manager and staff for further review, the Cone of Silence shall remain in effect until an award is made, a contract is approved, or the City Commission takes any other action which ends the solicitation.

Public Utilities Director

c: City Commission Office City Manager City Clerk (sunshine board) Affected department(s)/office(s)

# CITY OF HOLLYWOOD TERMS AND CONDITIONS

- Execution of Bid: Bid must contain an original signature of an individual authorized to bind the bidder. Bid must be typed or printed in ink. All corrections made by the bidder to the bid must be initialed by the person signing the bid. All illegible entries, pencil bids or corrections not initialed will not be tabulated. The original bid conditions and specifications cannot be changed or altered in any way. Altered bids will not be considered.
- No Bid: If not submitting a bid, respond by returning this Bidder Acknowledgment form, marking it "NO BID," no later than the stated bid opening date and hour, and explain the reason in the space provided. Failure to respond without sufficient justification may be cause for removal of the bidder's name from the bid mailing list.
- 3. <u>Bid Opening</u>: Shall be public, on date, location and time specified on the bid form. It is the bidder's responsibility to assure that his bid is delivered at the proper time and place. Bids which for any reason are not so delivered will not be considered. It is the bidder's responsibility to assure all numbered pages of the bid, all attachments thereto and all addenda released are received prior to submitting a bid. All bids are subject to the conditions specified herein on the attached bid documents and on any addenda issued thereto.
- 4. <u>Addenda to Bid:</u> The City of Hollywood reserves the right to amend this bid prior to the bid opening date indicated. Only written addenda will be binding. The City is not bound by any oral representations, clarifications, or changes made in the written specifications by the City's employees, unless such clarifications or changes are provided to bidders in written addendum form.
- 5. <u>Prices Quoted:</u> Deduct trade discounts and quote firm net prices. Give both unit and extended total. Prices must be stated in units to quantity specified in the bidding specifications. In case of discrepancy in computing the amount of the bid, the unit price quoted will govern and the total will be adjusted accordingly. All prices quoted shall be F.O.B. destination, freight prepaid. (Bidder pays and bears freight charges. Bidder owns goods in transit and files any claims), unless otherwise stated in Special Conditions. Cash discounts for prompt payment will not be considered in determining the lowest net cost for bid evaluation purposes.
- Withdrawal of Bids: Bidders may request withdrawal of bid submittal prior to the scheduled bid opening time provided the request for withdrawal is submitted to the Director of Procurement Services in writing. No bids may be withdrawn for a period of ninety (90) days after the date of bid opening.
- 7. <u>Mistakes:</u> Bidders are expected to examine the specifications, delivery schedules, bid prices and extensions, and all instructions pertaining to supplies and services. Failure to do so will be at bidder's risk.
- 8. <u>Taxes:</u> The City of Hollywood is exempt from Federal Excise and State Sales Taxes on direct purchases of tangible personal property. This exemption does <u>not</u> apply to purchases of tangible personal property made by contractors who use the tangible personal property in the performance of contracts for the City of Hollywood. Contractors doing business with the City shall <u>not</u> be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the City nor shall any contractor be authorized to use the City's tax exemption number in securing such materials.
- 9. <u>Delivery:</u> Unless actual date of delivery is specified (or if specified delivery can not be met) show number of days required to make delivery after receipt of purchase order in space provided. Delivery time may become a basis for making an award. Delivery shall be within the normal working hours of the user, Monday through Friday, excluding holidays, unless otherwise specified and incorporated into contract document. Delivery shall be to the location specified in the bid specifications.

- 10. <u>Conditions and Packaging</u>: Unless otherwise stated in the special instructions to bidders or the bid sheets, or specifically ordered from an accepted price list, deliveries must consist only of new and unused goods and shall be the current standard production model available at the time of the bid. The goods must be suitably packaged for shipment by common carrier. Each container or multiple units or items otherwise packaged shall bear a label, imprint, stencil or other legible markings stating name of manufacturer or supplier, purchase order number and any other markings required by specifications, or other acceptable means of identifying vendor and purchase order number.
- 11.<u>Inspection, Acceptance & Title</u>: Inspection and acceptance will be at destination unless otherwise provided. Title to or risk of loss or damage to all items shall be the responsibility of the successful bidder until acceptance by the buyer, unless loss or damage results from negligence by the buyer. If the materials or services supplied to the City are found to be defective or not conforming specifications, the City reserves the right to cancel the order upon written notice to the seller and return product at bidder's expense.
- 12. <u>Safety Standards</u>: All manufactured items and fabricated assemblies shall comply with applicable requirements of Occupational Safety and Health Act and any standards there under.
- 13. Open-End Contract: No guarantee is expressed or implied as to the total quantity of commodities/services to be purchased under any open end contract. Estimated quantities will be used for bid comparison purposes only. The City of Hollywood reserves the right to: issue purchase orders as and when required, or issue a blanket purchase order for individual agencies and release partial quantities. No delivery shall become due or be acceptable without a written order by the City, unless otherwise provided in the contract. Such order will contain the quantity, time of delivery and other pertinent data. However, on items urgently required, the seller may be given telephone notice, to be confirmed by an order in writing.
- 14. Fixed Contract Quantities: Purchase order(s) for full quantities will be issued to successful bidder(s) after notification of award and receipt of all required documents. Fixed contract quantities up to twenty (20) percent of the originally specified quantities may be ordered prior to the expiration of one (1) year after the date of award, provided the contractor agrees to furnish such quantities at the same prices, terms and conditions.

# 15.Payment:

- A. **Payment from City to Contractor:** Payment will be made by the City after commodities/services have been received, accepted and properly invoiced as indicated in contract and/or order. Invoices must bear the purchase order number.
- B. Payment from Contractor to Subcontractor and Materials Supplier: When a contractor receives from the City of Hollywood any payment for contractual services, commodities, materials, supplies, or construction contracts, the contractor shall pay such moneys received to each Subcontractor and Material Supplier in proportion to the percentage of work completed by each Subcontractor and Material Supplier at the time of receipt. If the contractor receives less than full payment, then the contractor shall be required to disburse only the funds received on a pro rata basis with the Subcontractors and Material Suppliers, each receiving a prorated portion based on the amount due on the payment. If the contractor without reasonable cause fails to make payments required by this section to Subcontractors and Material Suppliers within fifteen (15) working days after the receipt by the contractor of full or partial payment, the contractor shall pay to the Subcontractors and Material Suppliers a penalty in the amount of one percent (1%) of the amount due, per month, from the expiration of the period allowed herein for payment. Such penalty shall be in addition to actual payments owed. Retainage is also subject to the prompt payment requirement and must be returned to the Subcontractor or Material Supplier whose work has been completed, even if the prime contract has not been completed. The Contractor shall include the above obligation in each subcontract it signs with a Subcontractor or Material Suppler.

- 16. Variations to Specifications: Bidder must indicate any variance to our specifications, terms and/or conditions, no matter how slight. If variations are not stated in the Bid, it will be assumed that the product or service fully complies with our specifications, terms and/or conditions. The City will not interpret variances based on any attached sales or manufacturer's literature unless otherwise specified herein by the City.
- 17. Interpretations: Any questions concerning conditions and specifications shall be directed in writing to the Procurement Division. No interpretation(s) shall be considered binding unless provided to all Bidders in writing by the Director of the Procurement Services.
- 18.<u>Awards:</u> If a specific basis of award is not established in the invitation for Bid, the award shall be to the responsible bidder with the lowest responsive bid meeting the written specifications. As the best interest of the City may require, the right is reserved to make award(s) by individual commodities/services, group of commodities/services, all or none or any combination thereof. When a group is specified, all items within the group must be bid. A bidder desiring to bid "No Charge" on an item in a group must so indicate; otherwise the bid for the group will be construed as incomplete and may be rejected. However, if bidders do not bid all items within a group, the City reserves the right to award on an item by item basis. When a group bid is indicated for variable quantities and the bid for the group shows evidence of unbalanced bid prices, such bid may be rejected. The Director of Procurement Services, or the City Commission, whichever is applicable, reserves the right to waive technicalities and irregularities and to reject any or all bids, or any part of any bid. The City also reserves the right to award any resulting agreement as it deems will best serve the interests of the City.
- 19. Warranty: If within one year after project completion, any work is found to be defective, the Contractor shall promptly without cost to the City replace it with non-defective work.
- 20. Samples: Samples of items, when required, must be furnished by bidder free of charge to the City. Each individual sample must be labeled with bidder's name, manufacturer's brand name and be delivered by him within ten (10) calendar days of the bid opening unless the schedule indicates a different time or unless submission is required before the bid opening. If samples are required subsequent to the bid opening, they should be delivered within ten (10) calendar days of the request. The City will not be responsible for returning samples.
- 21. Patents and Royalties: The bidder, without exception, shall indemnify and save harmless the City and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City. If the bidder uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.
- 22. Assignment: Contractor shall not transfer or assign the performance required by this bid without the prior written consent of the Director of Procurement Services. Any award issued pursuant to this bid invitation and the monies which may become due hereunder are not assignable except with the prior written approval of the Director of Procurement Services.
- 23.<u>Indemnification:</u> The Contractor shall indemnify, hold harmless, and defend the City of Hollywood, its officers, agents and employees from and against any and all claims, damages liability, judgements or causes of action including costs, expenses and attorneys fees incurred as a result of any error, omission or negligent act by the Contractor its officers, employees, agents, subcontractors or assignees arising out of this bid.
- 24. Equal Employment Opportunity: No Contractor shall discriminate against any employee or applicant for employment because of race, religion, color, sex or National origin, or physical or mental handicap if qualified. Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment without regard to their race, religion, color, sex or National

origin, or physical or mental handicap. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause. The Contractor further agrees that he/she will ensure that Subcontractors, if any, will be made aware of and will comply with this nondiscrimination clause.

- 25. Local Preference: Pursuant to §38.50 of the City of Hollywood Code of Ordinances, the City shall grant a preference to Hollywood vendors if their initial bid is within 5% of the bid of the lowest responsive responsible bidder that is a non-local Hollywood vendor. The preference shall allow the local Hollywood vendor to submit a second and final offer which must be at least 1% less than the bid of the lowest responsible responsive non-local Hollywood vendor to be awarded. The local Hollywood vendor shall have the burden of demonstrating that it maintains a permanent place of business with full-time employees within the City limits and has done so for a minimum of one (1) year prior to the date of issuance of a bid or proposal solicitation within Hollywood, Florida. All supporting documentation (e.g. City of Hollywood valid local business tax receipt) for local preference eligibility must be received with the bid package prior to the bid opening date and time.
- 26.<u>ADA Compliance:</u> "Persons with disabilities who require reasonable accommodation to participate in City Programs and/or services may call the Equal Opportunity Manager, Office of Human Resources and Risk Management (954) 921-3218. If an individual is hearing or speech impaired, please call Florida Relay Service 1-800-955-8771.
- 27. Public Entity Crimes: "A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list."

# BID FORM CITY OF HOLLYWOOD, FLORIDA

# "AN EQUAL OPPORTUNITY AND SERVICE PROVIDER AGENCY"

# Special Instructions to Bidders (In addition to General Conditions)

SUBMISSION OF FORMAL SEALED BIDS: The Invitation for Bid form must be executed and submitted with all bid sheets and should be in a sealed envelope. The original should be signed in blue ink. The pricing page must be completed in its entirety (all spaces must be filled; no spaces are to be left blank). Bids not submitted on bid sheets and spaces left blank on the pricing page may be rejected. The Bidder must check for any addendums to this bid, and continue to check for any addendums up to the due date and time of this bid. The face of the envelope should contain the vendor's name, return address, due date and time of bid opening, and bid number. All bids are subject to the conditions specified herein. Those which do not comply with these conditions are subject to rejection.

# PURPOSE:

The City of Hollywood, Florida is hereby seeking bids from approved water proofing contractors <u>only</u> for cleaning exterior surface, surface preparation, and replacement of existing crack sealant on exterior of the exposed concrete panel walls of the MS/RO Operations Building at the South Regional Water Treatment Plant, located at 3441 Hollywood Boulevard, Hollywood, Florida 33021 as described herein and shown in the attached drawings.

# **PRE-BID MEETING:**

A <u>mandatory</u> pre-bid meeting will be held on January 30, 2014, 10:00 a.m. in the Water Treatment Plant Conference Room at 3441 Hollywood Boulevard, Hollywood, FL 33021. Entrance into this site is though the guard gate on North 35<sup>th</sup> Avenue.

# SCHEDULE:

This project shall be completed within forty-five (45) days of issuance of the Notice-to- Proceed.

# **INSURANCE:**

The Contractor shall provide insurance certificates in accordance with the requirements/limits listed in **Exhibit** "A".

# CONTACTS:

The contact for the City of Hollywood regarding this bid is Leslie H. Pettit, P.E., Engineer, <u>lpettit@hollywoodfl.org</u>, 954-651-0892. It is preferred that all other questions be submitted in writing. Questions should be directed to the City of Hollywood, 1621 N. 14<sup>th</sup> Avenue, Hollywood, Florida 33020, Attention: Leslie Pettit, P.E., Engineer, Department of Public Utilities, or to facilitate prompt receipt of questions, they may be sent via e-mail, <u>lpettit@hollywoodfl.org</u>.

# QUALIFICATIONS AND DISQUALIFICATIONS OF BIDDERS:

The Contract will be awarded only to a Bidder, who in the opinion of the Engineer, is fully qualified to undertake the work. The City reserves the right before awarding the Contract to require a Bidder to submit such evidence of his qualifications as it may deem necessary and may consider any available evidence of his financial status, technical qualifications and other qualifications and abilities. Any one of the following causes, among others, may be considered as sufficient justification to disqualify a Bidder and reject his Bid:

- A. Submission of more than one Bid for the same work by an individual, firm, partnership or corporation under the same or different names.
- B. Evidence of collusion.
- C. Previous participation in collusive Bidding on work for the City of Hollywood, Florida.
- D. Submission of an unbalanced Bid in which the prices Bid for some items are out of proportion to the prices Bid for other items.
- E. Lack of competency. The Engineer may declare any Bidder ineligible, at any time during the process or receiving Bids or awarding the Contract, if developments arise which, in his opinion, adversely affects the Bidder's responsibility. The Bidder will be given an opportunity, by the Engineer, to present additional evidence before final action is taken.

The bidder <u>must</u> provide as part of their references a minimum of three (3) similar projects performed within the last five (5) years. The projects must be similar in nature and size. Judgment of 'similar projects' is at the sole discretion of the City's Project Manager/Engineer. <u>Contractors with only commercial/residential water proofing experience are not acceptable.</u> <u>Contractor must have a minimum of three years'</u> experience in heavy industrial water proofing.

- F. Lack of responsibility as shown by past work judged by the Engineer from the standpoint of workmanship and progress.
- G. Uncompleted work for which the Bidder is committed by Contract, which is in the judgment of the Engineer, might hinder or prevent the prompt completion of work under this Contract.
- H. Being in arrears on any existing Contracts with the City, or any taxes, licenses or other monies due the City; in litigation with the City or having defaulted on a previous contract with the City.

# AWARD OF CONTRACT:

The City Commission/City Manager reserves the right to reject any or all Bids, or any part of any Bid, to waive any informality in any Bid, or to re-advertise for all or any part of the work contemplated. If Bids are found to be acceptable by the City Commission/City Manager, written notice of award will be given to the lowest responsive and responsible Bidder.

# HOLD HARMLESS AND INDEMNITY CLAUSE:

# (Company Name and Authorized Signature, Print Name)

,the contractor shall indemnify, defend and hold harmless the City of Hollywood, its elected and appointed officials, employees and agents for any and all suits, actions, legal or administrative proceedings, claims, damage, liabilities, interest, attorney's fees, costs of any kind whether arising prior to the start of activities or following the completion or acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the contractor, or anyone acting under its direction, control, or on its behalf in connection with or incident to its performance of the contract.

# (Company Name and Authorized Signature, Print Name)

Further certifies that it will meet all insurance requirements of the City of Hollywood and agrees to produce valid, timely certificates of coverage.

**Disclosure of Conflict of Interest:** Vendor shall disclose below, to the best of his or her knowledge, any City of Hollywood officer or employee, or any relative of any such officer or employee as defined in Section 112.3135, Florida Statutes, who is an officer, partner, director or proprietor of, or has a material interest in the vendor's business or its parent company, any subsidiary, or affiliated company, whether such City official or employee is in a position to influence this procurement or not.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City of Hollywood Purchasing Ordinance.

Name

Relationship

In the event the vendor does not indicate any names, the City shall interpret this to mean that no such relationship exists.

# "Pricing Page Sheet 1 of 2"

<u>NOTE:</u> Give both unit price and extended total. Prices <u>must</u> be stated in units to quantity specified in the bid specifications. In case of a discrepancy in computing the amount of the bid, the unit price quoted will govern and the total will be adjusted accordingly. <u>No spaces are to be left blank, but should be marked as follows</u>:

N/A = Not Applicable N/C = No Charge N/B = No Bid

# Spaces marked with a zero (0) will be considered no charge.

If this Proposal is accepted, the undersigned Bidder agrees to complete all work under this contract within <u>45</u> calendar days following the issuance of the Notice to Proceed. **UNIT PRICE PREVAILS OVER TOTAL PRICE.** All entries on this form must be typed or written in block form in ink. Quantities provided are for information purposes.

<u>No.</u>	Description	Qty	Unit	Unit Price	Total
1.	Pressure Clean, repair/patch, exterior of exposed pre-cast concrete panels at the MS/RO Operations Building per attached plans.	1	LS		
2.	Removal of existing caulking/sealant from the exterior joints, seams, and cracks at the MS/RO Operations Building. Supply and provide Sikaflex – 2c NS EX Mix in all exterior joints seams and cracks at the MS/RO Operations Building per attached plans and specifications.	1	LS		
BASE PROJ	BID TOTAL FOR COMPLETE	.1	LS		

TOTAL BASE BID IN WRITING

# "Pricing Page Sheet 2 of 2"

# **Bid Alternate**

A.	Additional cost to provide and apply Evonik Industries Protectosil CIT to the exterior of the exposed concrete panels of the MS/RO Operations Building per attached plans and specifications.			
		1	LS	 
В.	Additional cost to strip the paint on the vents and re-paint the exterior wall vents to match existing	1	LS	

It is the City of Hollywood's intent to award this project to the lowest responsive and responsible bidder for the "Total Base Bid" plus any City selected "Bid Alternates".

# NOTES:

- 1. REFER TO MANUFACTURE PRODUCT DATA SHEET AND SCOPE OF WORK FOR ADDITIONAL DESCRIPTION OF ITEMS.
- 2. THE CONTRACTOR SHALL BE SELECTED BASED UPON THE TOTAL BASE BID FOR ITEMS 1 THROUGH 2 PLUS ANY SELECTED BID ALTERNATE ITEMS.

Contractor Name: \_\_\_\_\_

# PLEASE RETURN AN ORIGINAL AND THREE COPIES OF ENTIRE BID DOCUMENT. BID SUBMITTAL COMPLETION CONFIRMATION:

I, the Bidder, have completed and signed (preferably in blue ink) all required bid document pages.

I, the Bidder, acknowledge reading information relative to the City's "Local Preference" as contained in this document and providing for such information. (If applicable to this proposal)

I, the Bidder, acknowledge reading and signing the Hold Harmless Statement.

I, the Bidder, have submitted my bid on the bid sheets provided, and acknowledge that bids not submitted on bid sheets provided may be rejected.

I, the Bidder, have filled in all spaces on the pricing page as noted, and acknowledge that bids with spaces left blank on the pricing page may be rejected.

I, the Bidder, have included all information, certificates, licenses and additional documentation as required by the City in this bid document.

I, the bidder, have checked for any addendums to this bid, and will continue to check for any addendums up to the due date and time of this bid.

I, the Bidder, have included on the face of the envelope, my company name and return address, the date and time of bid opening, and the bid number.

I, the Bidder, have submitted one (1) original and one (1) copy of the entire bid document and addendums.

I have read and completed (if applicable) the "Disclosure of Conflict of Interest".

I, the Bidder, am aware that a Notice of Intent to award this bid shall be posted on the City's website at <u>www.hollywoodfl.org</u> and on the Procurement Services bulletin board in room 303 at City Hall, and that it is my responsibility to check for this posting. Also, I have provided my email address, as the City, at its discretion, may provide me information by such means regarding this procurement process.

I, the Bidder, have submitted all supporting documentation for local preference eligibility, which must be received with the bid package prior to the bid opening date and time (if applicable).

NAME OF COMPANY: \_\_\_\_\_

BIDDER'S NAME: \_\_\_\_\_

BIDDER'S AUTHORIZED SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

12 Water Treatment Plant MS/RO Operations Bldg. Wall Sealant Replacement

14-5108

# CLEANING AND WATER PROOFING SPECIFICATIONS FOR THE MS/R0 OPERATIONS BUILDING AT THE SOUTHERN REGIONAL WATER TREATMENT PLANT

# Background:

The MS/RO Operations Building at the City of Hollywood Water Treatment Plant was constructed in the mid 1990's using pre-cast concrete wall panels approximately 6' wide with sealant between the approximately one-inch maximum gaps between panel joints. The precast panel wall joints and joints at openings are leaking and repairs are required to keep moisture out of this building. In addition the building exterior requires cleaning, crack repair, and sealing.

# Scope of Work

The Contractor shall provide all labor, equipment, materials, and insurance necessary to clean, prepare surfaces, replace sealant in the cracks/joints, and apply corrosion inhibitor on the exterior surfaces of exposed precast panels at the Water Treatment Plant, 3441 Hollywood Blvd., Hollywood Florida 33021 in accordance with the attached contract documents as shown in the attached plan. The Contractor shall use the corrosion inhibitor/coatings specified in the specifications; material substitution are <u>not</u> permitted. The Contractor shall protect the adjacent surfaces from overspray/drips and damage. Contractor shall warranty the installation and workmanship 100% for a minimum of one year and coordinate their work with the City's Public Utilities Department maintaining these operational facilities.

This project includes the following:

- A. The exterior of the exposed precast panels to be cleaned and have joints/cracks sealed in this scope of work include the following:
  - a. West side of the Building (approx. 8160 sf).
  - b. East side of the Building (approx. 8160 sf).
  - c. South Side of the Building (approx. 1330 sf).
  - d. North Side of the Building (approx. 710 sf).

NOTE: Above estimate quantities are for reference only, contractor shall make their measurements of quantities during their mandatory pre-bid meeting.

- B. Apply a City approved chemical to the exterior of the pre-cast panels to kill existing surface mold and mildew.
- C. Pressure cleaning of all exterior surfaces of exposed precast panels to remove oils, rust, dirt, and all foreign matter that might prevent sealant bonding. Pressure clean with 2,500 PSI to 5,000 psi with no smaller than a 15-degree fan nozzle.
- D. Remove all deteriorated concrete.
- E. Removal of all existing crack/seam/joint sealant. This includes, but not limited to, the joints between the roof and precast wall panels; windows/vents/piping and precast wall panels; and

precast wall panels and adjacent pre-cast wall panels. New backer rods or sealant cannot be installed until the NACE inspector approve the cleaned joints/cracks.

- F. Replace existing joint backer rods in joints with City approved closed cell backer rods and add backer rods in cracks as required by manufacture recommendations.
- G. Apply sealant (Sikaflex 2c NS EX Mix) in all holes exterior holes, around piping/conduit penetrations, in areas of deteriorated concrete, and all cracks/seams/joints on and adjacent to the precast panels per manufacture recommendations. See the attached product data sheets including manufacture application recommendations.
- H. Apply corrosion inhibitor treatments (Protectsil CIT) to cleaned exterior of pre-cast panels per manufacture recommendations. See the attached product data sheets including manufacture application recommendations.
- I. Pressure clean and remove the existing paint on the first floor exterior louver vents on the north and south of the RO/MS Building. Paint of the louver vents cannot begin until with out approval of the NACE inspector.

# Inspections:

ECSD will contract with a NACE (National Association of Corrosion Engineers) Inspector to perform inspections and certify compliance with manufacture recommendations during preparation and application of the sealants/coatings to the exterior of the MS/RO Operations Building. The Contractor shall coordinate their work and the required NACE Inspector inspections with the NACE Inspector.

# Permits:

Not required for this maintenance project.

# Site Access:

Contractor shall coordinate site access work schedule with water treatment plant personnel. Contractor work shall not interfere with water plant operations.

# Protection of Existing Roof:

The protection and documentation of the existing roof is critical as this roof is only 1-2 years old. Installation of the new sealant/coatings on the second floor exterior walls requires working from the 1<sup>st</sup> floor roof. The Contractor shall provide protective coverings/plywood on the existing roof to prevent roof damage when working on or near the roof. The Contractor along with the City will perform a pre and post construction inspection of these roof areas including photographs/video. The Contractor will be required to make repairs as required to restore the roof to pre-construction conditions at no additional cost to the City. All required roof repairs shall be made by the Contractor by subcontracting to a roofing manufacture's approved roof contractor as required to maintain the warrantee on these roofs.

# Protection of Existing Facilities:

The Contractor shall exercise care so as not to drip/spill sealants on adjacent concrete slabs, walls, roofing, landscaping, fences, piping, vehicles, and equipment at this site. Relocate or protect existing conduits, piping, valves, and fixtures on the exterior of the Building as required to apply new joint/crack sealants.

# Site Restoration:

The Contractor shall restore site to preconstruction conditions at no additional cost to the City upon project completion. The Contractor shall repair all contractor damage to existing roof at no additional cost to the City.

# ATTACHMENT "A"

ACORD. CERTIFICATE	OF LIABILITY INSURANCE				DATE (MM/DD/YY)	
RODUCER		NO RI	GHTS UPON THE CE D. EXTEND OR ALTE	ED AS A MATTER OF INFORMATION RIIFICATE HOLDER. THIS CERTIFICA R THE COVERAGE AFFORDED BY TH COMPANIES AFFORDING CO	TE DOES NOT E POLICIES BELOW.	
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sores		COMPA	нт			
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OVERAGE		Ø				
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LIS OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITION	WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSI	UED OR MAY PERTAIN	. THE MOURANCE AF	ED. HOTWITHSTANDING ANY REQUIREN FORDED BY THE POLICIES DESCRIBED I	IENT, TERM IEREBI IS	
R TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MMADDAYY)		LIMITS	
GENERAL LIABILITY	1		- Sere (and arrig	GENERAL AGGREGATE	\$1,000,000	
CONMERCIAL GENERAL LIABLITY				PRODUCTS-COMPIOP AGG		
				PERSONAL & ADV INJURY	\$1,000,000	
OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE	\$1,000,000	
				FIRE DAMAGE (ANY ONE FIRE)	\$1,000,000	
				MED EXP (ANY ONE PERSON)	\$50,000	
	1			ALD LAT (ANT ONE PERSON)	\$5,000	
ANY AUTO				COMBINED SINGLE LIMIT	6500 000	
ALL OWNED AUTOS			2	COMDITED SHOLE LIMIT	\$500,000	
SCHEDULED AUTOS				BOOK VIN HIDY INCO BEOGRAM		
HINED AUTOS				BODILY INJURY (PER PERSON)	\$	
NON-OWNED AUTOS				BODILY INJURY (PER ACCIDENT)	\$	
				PROPERTY DAMAGE	\$	
GARAGE LIABE.ITY				AUTO ONLY - EA ACCIDENT	s	
ANYAUTO				OTHER THAN AUTO ONLY:		
				EACH ACCIDENT	s	
				AGGREGATE	s	
EXCESS LINEALITY				EACH OCCURRENCE	5	
UMBRELLA FORM			1	AGGREGATE	5	
OTHER THAN UMBRELLA FORM					1	
WORKER'S COMPENSATION AND				STATUTORY LIMITS		
EMPLOYERS' LIABILITY			r	EACH ACCIDENT	\$100,000	
THE PROPRETOR / PARTHERS / BICL EXECUTIVE OFFICERS ARE: EXCL			r	DISEASE - POLICY LIMIT	\$500,000	
OTHER CONCERNANCE FOR EACH				DISEASE - EACH EMPLOYEE	\$100,000	
CREATION OF OPERATION SACOLATION SWEHICLESS P C. (14) OF Holloward ortificate Holdor's named as A	ECALITEMS					
dificate Holder	GANCELLATION					
y of Hollywood 600 Hollywood Blvd.	E ABOVE DESCRIBED	POLICES BE CANCEL EN NOTICE TO THE CE	LED BEFORE THE EXPERATION DATE TH RTFICATE HOLDER NAMED TO THE LEF	EREDF, THE ISSUING COMPANY T, BUT FARURE TO MAR, SUCH		
ollywood, FL 33020	Intract stored mire	OTICE SHALL MPOSE NO OBLIGATION OR LIABLITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.				
orrywood, rb 55020	AUTHKRIZED REPRESE	NIAINE				
1023 5 (174)						

ELEUATION LOOKING NORTH PRE-CAST WALL PANELS, 2nd FLR. PROTECT / EXISTING ROOF



Product Data Sheet Edition 7.15.2008 Identification no. 764-15N Sikaflex-2c NS EZ Mix

# Sikaflex<sup>®</sup>-2c NS EZ Mix

Two-component, non-sag, polyurethane elastomeric sealant

Description	Sikaflex-2c NS EZ Mix is a 2-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a <u>non-sag</u> consistency. Meets ASTM C-920, Type M, Grade NS, Class 25, use T, NT, M, G, A, O and Federal Specification TT-S-00227E, Type II, Class A. Meets CAN/CGSB 19.24 - M90.					
Where to Use	<ul> <li>Intended for use in all properly designed working joints with a minimum depth of ¼ inch.</li> <li>Ideal for vertical and horizontal applications.</li> <li>Placeable at temperatures as low as 40F.</li> </ul>					
	<ul> <li>Adheres to most substrates commonly found in</li> <li>An effective sealant for use in Exterior Insulation</li> </ul>					
	<ul> <li>An effective sealant for use in Exterior Insulatio</li> <li>Submerged environments, such as canal and r</li> </ul>					
Advantages	Capable of ±50% joint movement.					
	Chemical cure allows the sealant to be placed	in joints exceeding ½ in. in depth.				
	High elasticity with a tough, durable, flexible co	nsistency.				
	<ul> <li>Exceptional cut and tear resistance.</li> <li>Exceptional adhesion to most substrates without</li> </ul>	it priming				
	<ul> <li>Available in 40 architectural colors.</li> </ul>	ar printing.				
	<ul> <li>Color uniformity assured via Color-pak system.</li> </ul>					
	<ul> <li>Available in pre-pigmented Limestone Gray (no</li> <li>Non one grap in wide initial</li> </ul>	Color-pak needed).				
	<ul> <li>Non-sag even in wide joints.</li> <li>ANSI/NSF 61 approval for contact with potable</li> </ul>	water				
	Easy to mix.					
	Paintable with water-, oil-, and rubber-base paintable	nts.				
~	Jet fuel resistant.					
Coverage	1 gal. yields 231 cu. in. or 154 lin. ft. of a 1/2 in. x	1/4 in. joint.				
Packaging	1.5 gal. unit, 3 gal unit. Color-pak is purchased sep	arately. Limestone Gray color available pre-pigmented.				
How to Use Surface Preparation		ost-free. Joint walls must be free of oils, grease, curing compound revent bond. Ideally this should be accomplished by mechanical means				
	Bond breaker tape or backer rod must be used in b					
Priming	Priming is typically not necessary. Most substrates only require priming if sealant will be subjected to water immersion after cure. Testing should be done, however, on questionable substrates, to determine if priming is needed. Consult Technical Service or Sikaflex Primer Technical Data Sheet for additional information on priming.					
	Note: Most Exterior Insulation Finish Systems (EIF	S) manufacturers recommend the use of a primer. When EIFS manu- indicates a primer is necessary, Sikaflex 429 primer is recommended.				
Mixing	Pour entire contents of Component 'B' into pail of C	omponent 'A'. Add entire contents of Color-pak into pail and mix with a Mix for 3-5 minutes to achieve a uniform color and consistency. Scrap				
	Typical Data (Material and cu	ring conditions 73°F (23°C) and 50% R.H.)				
	Shelf life	One year in original, unopened containers.				
	Storage Conditions	Store dry at 40°-95°F (4°-35°C). Condition material to 65°-75°F before using.				
	Colors	A wide range of architectural colors are available. Special colors available on request.				
	Application Temperature	40° to 100°F, ambient and substrate temperatures. Sealant should be installed when joint is at mid-range of its anticipated movement.				
	Service Range	-40° to 170°F (-40°-75°C).				
	Curing Rate (ASTM C-679)	Tack-Free Time 8-10 hrs. Final Cure 3 days				
	Application Life	4-6 hrs.				
	Tear Strength	ASTM D-624 45 lb./in.				
	Shore A Hardness	ASTM D-2240 25 ± 5				
	Tensile Properties (ASTM D-412) Tensile Strength at Break Tensile Elongation 100% Modulus	95 psi 300% 70 psi				
<b>0</b>	Adhesion in Peel (Fed Spec. TT-S-00 Substrate Peel Strength Concrete >15 lb.	1.51				
W an and	Weathering Resistance	Excellent				
	Chemical Resistance	Good resistance to water, diluted acids, diluted alkalines, and residential sewage. Consult				

	When mixing in cold weather (<50°F), do not force the mixing paddle to the bottom of the pail. After adding Component 'B' and Color-pak into Component 'A', mix the top 1/2 to 3/4 of the pail during the first minute of mixing. After scraping down the sides of the pail, mix again for another minute. The paddle should reach the bottom of the pail between the first and second minute of mixing. Scrape down the sides of the pail a second time and then mix for an additional 2-3 minutes until the seal- ant is well blended. Color-pak must be used with tint base. For pre-pigmented Limestone base, just mix with low speed drill and Sikaflex paddle (no Color-pak needed).
Application	Recommended application temperatures 40°-100°F. Pre-conditioning units to approximately 70°F is necessary when work- ing at extremes. Move pre-conditioned units to work areas just prior to application.
	Apply sealant only to clean, sound, dry, and frost-free substrates. Sikaflex-2c should be applied into joints when joint slot is at mid-point of its designed expansion and contraction.
	To place, load directly into bulk gun or use a follower plate loading system. Place nozzle of gun into bottom of joint and fill entire joint. Keeping the nozzle deep in the sealant, continue with a steady flow of sealant preceding nozzle to avoid air entrapment. Also, avoid overlapping of sealant since this also entraps air. Tool sealant to ensure full contact with joint walls and remove air entrapment. Joint dimension should allow for 1/4 inch minimum and 1/2 inch maximum thickness for seal- ant. Proper design is 2:1 width to depth ratio. To accelerate the cure of Sikaflex-2c NS in cold weather temperatures, add Sikaflex-2c booster.
Limitations	<ul> <li>The ultimate performance of Sikaflex-2c NS EZ Mix, depends on good joint design and proper application.</li> <li>Minimum depth in working joint is 1/4 in.</li> </ul>
	Maximum expansion and contraction should not exceed 50% of average joint width.
	<ul> <li>Do not cure in the presence of curing silicones.</li> <li>Avoid contact with alcohol and other solvent cleaners during cure.</li> </ul>
	<ul> <li>Allow 3-day cure before subjecting sealant to total water immersion.</li> </ul>
	Avoid exposure to high levels of chlorine. (Maximum level is 5 ppm).
	Do not apply when moisture vapor transmission exists since this can cause bubbling within the sealant.
	Avoid over-mixing sealant.
	White color tends to yellow slightly when exposed to ultraviolet rays.
	<ul> <li>Light colors can yellow if exposed to direct gas fired heating elements.</li> </ul>
	When overcoating, an on-site test is recommended to determine actual compatibility.
	In horizontal joints exposed to vehicular or foot traffic, "TG" additive is recommended. See Sikaflex-2c NS TG data sheet for specific details.
Caution	Component 'A,; Irritant - Avoid contact. Product is a skin, respiratory and eye irritant. Use of safety goggles and chemical resistant gloves recommended. Use of a NIOSH approved respirator required if PELs are exceeded. Use with adequate ventilation.
	Component 'B,; Combustible; Sensitizer; Irritant - Contains Xylene. Keep away from heat, sparks and open flame. Use with adequate ventilation. Product is a respiratory and skin sensitizer. Avoid contact. Product is an eye, skin, and respiratory irritant. Use of safety goggles and chemical resistant gloves recommended. Use of a NIOSH approved respirator required if PELs are exceeded.
First Aid	In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician. For respiratory problems, remove to fresh air. Wash clothing before re-use. Discard contaminated shoes.
Clean Up	Uncured material can be removed with approved solvent. Cured material can only be removed mechanically. For spillage, collect, absorb, and dispose of in accordance with current, applicable local, state, and federal regulations.
Lin	ear Feet of Sealant per Gallon Sikaflex-2c NS EZ Mix Working Time, hours
Inches	1/4 $1/2$ $3/4$ $1/4$ $1/2$

Inches	1/4	1/2	3/4	1	11/4	11/2
1/4	308.0			İ		
1/2	154.0	77.0				
3/4	102.7	51.3	34.2			
1	77.0	38.5	25.7	19.3		
11/4	61.6	30.8	20.5	15.4	12.3	
1 1/2	51.3	25.7	17.1	12.8	10.3	8.6

construction

	73°F	100°F	40°F
Sikaflex-2c NS	4-6 hrs.	3 hrs.	6 hrs.
w/1 booster	2 hrs.	1 hr.	2-3 hrs.
w/ 2 boosters	1 hr.	<1 hr.	1.5 hrs.

### KEEP CONTAINER TIGHTLY CLOSED + KEEP OUT OF REACH OF CHILDREN + NOT FOR INTERNAL CONSUMPTION + FOR INDUSTRIAL USE ONLY

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Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product, s most current Technical Data Sheet, product label and Material Safety Data Sheet which are available online at <u>www.sikaconstruction.com</u> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

LIMITED WARRANTY: Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Technical Data Sheet if used as directed within shelf life. User determines suitability of product to intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTESEXPRESS OR IMPLIED SHALL APPLYINCLUDING ANYWARRANTY OF MERCHANTABILITY OR FITNESS FOR APARTICULAR PURPOSE. SIKASHALLNOT BELIABLE UNDERANYLEGAL THEORYFOR SPECIAL ORCONSEQUENTIAL DAMAGES. SIKASHALLNOT BERESPONSIBLE FOR THE USE OF THIS PRODUCT INA MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. 1-800-933-SIKA NATIONWIDE

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(12)

Sika Canada Inc. 601 Delmar Avenue Pointe Claire Quebec H9R 4A9 Phone: 514-697-2610 Fax: 514-694-2792 Sika Mexicana S.A. de C.V. Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920 Phone: 52 442 2385800 Fax: 52 442 2250537



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# **Protectosil® CIT**

# CORROSION INHIBITOR TREATMENT Product Data and Test Information



# **PRODUCT NAME**

# Protectosil<sup>®</sup> CIT

Advanced organofunctional corrosion inhibitor treatment for steel-reinforced concrete.

# MANUFACTURER

Evonik Degussa Corporation 379 Interpace Parkway, P.O. Box 677 Parsippany, NJ 07054-0677 1 (800) 828-0919 info.protectosil@evonik.com www.protectosil.com

PROTECTOSIL PRODUCTS ARE MANUFACTURED AT THE EVONIK DEGUSSA CORPORATION THEODORE, ALABAMA, PLANT AND THE EVONIK INDUSTRIES GMBH PLANT IN RHEINFELDEN, GERMANY, UNDER A QUALITY SYSTEM CERTIFIED TO ISO-9001 AND ISO-14001 REQUIREMENTS.

# **PRODUCT DESCRIPTION**

A surface-applied clear liquid that penetrates concrete and provides an organofunctional molecule to inhibit the electrochemical corrosion process between the rebar and the chloride ions, and oxygen and moisture within the concrete.

# **Protectosil CIT:**

- Dramatically reduces the chloride-ion-induced corrosion
   rate of concrete steel reinforcement
- Reduces corrosion in carbonated concrete steelreinforced structures
- Is an easy-to-use treatment that penetrates the concrete and chemically bonds with steel, cement paste and other siliceous material
- Will not discolor or change the substrate's surface appearance or surface friction
- Effectively inhibits macrocell (mat-to-mat) and microcell (along rebar) corrosion of steel-reinforced concrete
- Mitigates corrosion of rebar even in structures subjected to an environment with high relative humidity
- · Repels additional water and chloride ions

# APPROPRIATE APPLICATIONS

- Steel-reinforced cast-in-place, precast, post tension, GFRC, prestressed or other steel-reinforced concrete
- Parking decks, facades, balconies, walkways, piers, bridge decks, beams, columns and other steel-reinforced concrete structures
- Marine environments with high relative humidity and areas where deicer salts are used

# ADVANTAGES

**Protectosil CIT** dramatically decreases both mat-to-mat (>90%) and microcell (>87%) corrosion currents.



As the chart above shows, the proprietary organofunctional chemistry of **Protectosil CIT** can greatly reduce corrosion currents. This is done chemically by interrupting the electrolytic current and causing a slowdown of the corrosion process.

The corrosion process in steel-reinforced concrete is spontaneous and similar to the process in a galvanic cell or battery. The electrochemical reactions can be described as follows:

Fe<sup>++</sup> + 2Cl<sup>-</sup> → FeCl<sub>2</sub> FeC1<sub>2</sub> + H<sub>2</sub>O + OH<sup>-</sup> → Fe(OH)<sub>2</sub> + H<sup>+</sup> + 2Cl<sup>-</sup> 2Fe(OH)<sub>2</sub> +  $\frac{1}{2}O_2 \rightarrow Fe_2O_3 + 2H_2O$  anode  $\frac{1}{2}O_2 + H_2O + 2e^- \rightarrow 2$  OH<sup>-</sup> cathode

(Continued)

In the corrosion process, ferrous oxide (rust) takes up more volume than the original steel and causes stress on the concrete. This stress manifests itself as cracks, spalls and delaminations in the concrete structure. But the main consequence of concrete corrosion is the loss of steel cross section and the resulting loss of structural capacity. The three main factors affecting the corrosion rate are the concentrations of chloride ions, moisture and oxygen. Other factors, such as temperature, also contribute to the speed of the corrosion process. Warm, humid environments, such as coastal areas, accelerate the corrosion process and cause very rapid deterioration.

**Protectosil CIT** works on the molecular level to effectively inhibit the electrochemical interaction of the corrosion process. This advanced inhibiting action makes **Protectosil CIT** the best choice for difficult applications.

Applied to concrete structures repaired with polymer concrete, **Protectosil CIT** can equalize the differences in electrochemical potential between the polymer concrete and the existing concrete.

The product:

- · Inhibits corrosion of carbon and galvanized steel rebar
- Is effective in both marine and high-humidity
  environments
- · Is easy to apply
- · Is effective in heavily chloride-contaminated concrete
- Is effective in carbonated concrete
- Complies with VOC regulations
- Is vapor permeable
- Dries quickly
- · Prevents ingress of additional chlorides

# **TECHNICAL DATA**

**Protectosil CIT** is a proprietary liquid organofunctional material.

Color	clear to slightly amber
Density	0.88 g/cm <sup>3</sup>
pH	7 to 8
Flash Point	63°C (145°F)
Viscosity	0.95 mPa s
VOC	<400 g/l

# PERFORMANCE DATA

Cracked Concrete Beam Test (adapted from ASTM G109): **Protectosil CIT** reduces the corrosion rate by 90% versus the control specimen after 1 year.

Effectiveness of Protectosil CIT at Various Levels of Internal Concrete Relative Humidity



- Untreated concrete increase in corrosion during wetting cycle
- Untreated concrete decrease in corrosion during drying cycle
- Protectosil<sup>®</sup> CIT during wetting cycle

# Effectiveness of Protectosil CIT on Heavily Corroding Reinforced Concrete





The testing shown above consisted of steel-reinforced concrete slabs exposed to weekly cyclic salt water exposure. Once the slabs reached a high level of corrosion, **Protectosil CIT** was applied. The **Protectosil CIT** treatment reduced the total corrosion current by more than 90%.



The higher the resistivity or electrical resistance of the concrete, the lower the corrosion current.

# PROTECTOSIL CIT EFFECTIVENESS ON FHWA CRACKED BEAM CONCRETE

The Federal Highway Administration has developed testing protocol for evaluating inhibitors and coated rebar in aggressive corrosion environments. The testing is carried out under 48 weeks of cyclic salt water ponding (15% salt), high relative humidity (70% to 80%) and elevated temperatures (100°F). To make the test more realistic, the test specimens were cracked along the length of the reinforcement to simulate transverse bridge deck cracking. The results are illustrated in the chart below and summarized as follows:

Cracked concrete,	99% reduction of
no preexisting corrosion:	corrosion compared to untreated specimens
Management of the second se	

Cracked concrete, existing corrosion:

92% reduction of corrosion compared to untreated specimen



Effectiveness of Protectosil CIT on Chloride Ion Screening After Accelerated Weathering by ASTM G 85 and ASTM D4587



# **CONCRETE REPAIRS**

All delaminated, loose or spalled concrete must be removed and repaired. Shrinkage cracks that are dormant, shallow in depth and lacking structural significance can be treated with a multiple-coat application of **Protectosil CIT**. Other cracks should be routed, treated with **Protectosil CIT** and then sealed with a suitable sealant. **Protectosil CIT** does not affect the adhesion of most sealants to concrete or that of concrete to rebar. **Protectosil CIT** may be applied directly to the cleaned rebar prior to placing repair material.

# SURFACE PREPARATION

Concrete surface must be cleaned to remove all traces of dirt, dust, efflorescence, mold, grease, oil, asphalt, laitance, paint, coatings, curing compounds and other foreign materials that would inhibit penetration. Acceptable cleaning methods include shotblasting, sandblasting, waterblasting, grinding and chemical cleaning. Check with your Protectosil representative to verify that surface preparation is adequate.

# INSTALLATION

Apply multiple coats of **Protectosil CIT** to entire concrete surface, including repaired areas. Allow a minimum of 15 minutes between coats (or until visibly dry). Most applications require two or three coats at 175 to 225 ft<sup>2</sup>/gal (230 to 180 ml/m<sup>2</sup>) for each coat. The exact amount of **Protectosil CIT** will depend on the present corrosion rate, the chloride ion level and the service environment of the structure. Check with your Protectosil representative to confirm exact number of coats and coverage rate for your particular project.

**Protectosil CIT** should be applied to concrete using lowpressure pumping equipment with a wet fan type spray nozzle. Alternate methods include roller, brush or pouring (in crack for example). Do not alter or dilute the material. Do not apply to a wet or damp substrate.

# **APPLICATION CONDITIONS**

The proper application conditions are between 40°F and 100°F (5°C to 38°C). Lower or higher application temperatures require prior written approval from our technical service department. Do not apply if rain is expected within 4 hours following application, or if high winds or other conditions prevent proper application. The substrate should be as dry as possible prior to application. Depending on weather conditions, allow between 24 and 72 hours for the substrate to dry after rain or cleaning with water.

**Precautions:** Please read the **Protectosil CIT** material safety data sheet for detailed information. Keep containers away from heat, sparks, open flame and other sources of ignition. **Protectosil CIT** containers should be kept closed when not in use and should be stored at temperatures between 0°F and 120°F (-18°C and 50°C), away from rain and standing water.

# WARRANTY

Evonik Degussa Corporation offers a corrosion control warranty for the proper application of **Protectosil CIT**. The warranty is based on maintaining the steel corrosion current in a low-corrosion or passive state. Corrosion rates are determined by linear polarization devices verified as accurate by independent researchers. The time period covered by the warranty depends on the present corrosion rate, the service environment and the steel reinforcement orientation. Contact your Protectosil representative for a complete evaluation of your structure.

### AVAILABILITY

**Protectosil CIT** is available in 5- and 55-gallon drums (20 and 210 liters) to approved applicators, F.O.B. to various warehouses throughout the United States, Canada and Mexico. Contact us at 1 (800) 828-0919 for the sales representative in your area.

For more information, MSDS and the most updated product information, and to find your local representative, go to www.protectosil.com.

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# Protectosil<sup>®</sup> CIT

Corrosion Inhibitor Treatment for steel reinforced concrete



Evonik. Power to create.



It's a naturally occurring process that would appear harmless to most people. However, to owners of steel reinforced concrete structures, it's a nightmare. Buildings, bridges, parking decks and condominiums are major private and public investments that all can succumb to the Corrosion, simply defined, is the deterioration of metal components. deteriorating effects of corrosion.

Corrosion of concrete's reinforcing steel is a serious problem leading to cracks, spalls, leaks and falling concrete. The ramifications of these problems are: structural failure, collapse, expensive repairs, and legal liability. Repairing damage alone is not sufficient. The underlining corrosion will continue to cause future damage. Protectosil\* CIT can reduce corrosion at a fraction of the cost of future repairs.





Protectosil\* CIT actively protects steel reinforced concrete in two reduces active corrosion distinct ways:

protects against ingress of water-borne chlorides

Even in concrete exposed to high corrosion conditions, Protectosil\* CIT provides long-lasting protection. Protectosil\* CIT is an innovative patented organofunctional corrosion inhibitor from Evonik Degussa with outstanding features:

Suitable for cast-in-place, precast and high performance concrete Easy (spray on) application

Effective in structures with elevated chloride content

Effective in high humidity conditions

Proven to reduce active corrosion by more than 90%

Stops corrosion due to the ring anode or "halo effect"

2

# Content

- Because the best repair is the one that never has to be done
- Protectosil<sup>®</sup> CIT Protects From Within 54
- Protectosil<sup>®</sup> CIT interrupts the Q,
- mechanism of corrosion
- has been proven by independent test Protectosil<sup>®</sup> CIT v
  - agencies to reduce active corrosion
- Protectosil<sup>®</sup> CIT Saves You Money NG
- Protectosil<sup>®</sup> CIT Penetrates to the Steel Reinforcement ~
- Protectosil<sup>®</sup> CIT with Galvanic Protection Systems 00
- Protectosil<sup>e</sup> CIT with Corrosion Inhibitor Admixtures and 50
  - Pozzolans
- Analytical Testing/ Quality Control 5
- Fugitive Dyes for Quality Control 22
- 3.0 Protectosil\* CIT on the Internet

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Corrosion occurs when the steel becomes unstable or in electrochemical terms non-passive. Generally, steel in concrete is very stable, but environmental influences such as choride ions from deicers, sea water, or the carbonation of the concrete all cause the reinforcement to become unstable. At this point concoion is a simple electrochemical reaction between the steel, moisture and oxygen.

Protectosil\* CIT acts efficiently against both aspects of corrosion:

Protectosil<sup>e</sup> CIT's proprietary organofunctional chemistry interrupts the electrolytic current, causing the steel to repassivate itself and to substantially decrease the corrosion and its byproduct rust Protectosil\* CIT provides a deeply penetrating barrier that prevents additional water and chloride ions from reaching the rebar

The result: A dramatic decrease in corrosion!

# Field Study: NACE reports a clear decrease in corrosion

ProtectosII\* CIT was compared with other corrosion inhibitors to test their effectiveness in reducing corrosion currents and the repassivation of steel on concrete columns. NACE reported that, "The Protectosi" CIT treatment resulted in a clear decrease in corrosion current, and even repassivation is observed on the sensors initially showing active corrosion." (NACE Materials Performance, October 2006)

# Lab Study: FHWA Corrosion Performance Tests on Cracked Concrete

# The effectiveness of Protectosil\* CIT and other corrosion inhibitors was documented using the rigorous FHWA RD-98-153 nervoval To masser

documented using the rigorous FHWA RO-96-153 protocol. To measure the inhibitor's ability to reduce corrosion resistance, the protocol spanned two years and consisted of weekly sait water ponding on reinforced concrete specimens with transverse cracking.

Protectosil\* CIT was applied to the surface of cracked concrete specimens and after 48 wet dry cycles, the results demonstrated that Protectosil\* CIT ranked exceptionally high in the test over competitors and was 99% effective in preventing corrosion.



 Photos of spraybar application on the bridge the Commodure Barry Bridge



# Field Study: Commodore Barry Bridge (US \$22)

Transporting over 35,000 vehicles per day across the Delaware river, the Commodore Barry Bridge, represents a major passageway linking Southeastern Pennsylvaing & Southern New Jersey. In 2001, the Delaware River Port Authority approached Evonik Degussa Corp. to enabilitate the bridge which showed signs of corrosion damage due to chloride lon ingress and transverse cracking. After analytical testing confirmed the amount of corrosion present, Protectosi, 201 searches, the or for the bridge deck and all its approaches.



chlorides, but it also protects your assets. By reducing repair costs and increasing the service life of your structure Protectosil\* CIT only protects the rebar from corrosion and Protectosil<sup>e</sup> CIT's protection system not can save you substantial money.

**Additional Cost Savings Facts** 

- Corrosion repairs costs run between \$80 to \$100 per sq. foot
  - Repairs result in lost revenue due to structural down time
- competing corrosion reduction strategies Protectosil<sup>®</sup> CIT costs less than
  - Cost payback is normally less than **3 years**

Case Study: Monroe County Parking Facility, Monroe, PA

parking structure in Monroe, Pennsylvania. In 1996, Protectosil\* CIT was applied to and ensure the effectiveness of the inhibitor. Each annual test has verified that Protectosil<sup>e</sup> CIT is working. The long term benefits of Protectosil\* CIT remediate corrosion problems that were present such as high corrosion current and delamination. Each year corrosion measurements have been performed at have been demonstrated on a four level the site since the application to check



Field Performance of Protectoolf" CIT: Parking Structure Expased to Deicar Saits



Analysis of steel reinforcement proves that Protectosil<sup>®</sup> CIT penetrates and forms a chemical bond to the steel. X-Ray Photoelectron Spectroscopy (XPS) studies of steel extracted out of concrete treated with Protectosil® CIT clearly show the chemical changes imparted by the inhibitor. XPS is a quantitative spectroscopic surface chemical analysis technique. It's often used to measure elemental composition on surfaces of a material, including steel. The detection limit for most elements using XPS is 100 ppm to 1000 ppm. The charts below are XPS results. (Aqura Analytical Solutions)

Autopsies of steel reinforced concrete specimens after 520 days of cyclic salt water exposure



Amino alcohol/carboxylate inhibitor







Untreated me Protectosil" CIT •

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