

Board President Richard T. Pollack

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Board Trustee Ginger Haas

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FOUR RIVERS SANITATON AUTHORITY INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

Date: June 21, 2022		
Name of Bidding Firm:		
Address:		
City:	State:	Zip:
Phone:		
Email:		

Bid Opening Time & Date: 2:00 p.m., July 12, 2022

Bids will be accepted until the specified opening time and date. Any bid delivered after the opening time and date will be refused.

The public bid opening will take place in person and may be accessed remotely with the following information:

From your computer, tablet or smartphone.

https://meet.goto.com/527581309

Or dial in using your phone.

United States: +1 (224) 501-3412

Access Code: 527-581-309

Mandatory Pre-Bid Meeting. Y June 30, 2022 10:00 a.m.

Performance Bond: Y Prevailing Wage: Y

Bid Bond: Y

PLEASE MARK THE RETURN SEALED ENVELOPE:

- 1. Bid Due Date and Time
- 2. Title of Job
- 3. Bid Number

SEND BIDS TO:

Four Rivers Sanitation Authority 3501 Kishwaukee Street Rockford, IL 61109

BIDS WILL NOT BE ACCEPTED BY FAX OR EMAIL.

The Illinois Department of Human Rights registration number must be provided with the bid on the bid opening due date.

Bid results are available after contracts are awarded at the Regular Meeting of the Board of Trustees, held on the fourth Monday of the month. Please call 815-387-7425 or visit fourrivers.illinois.gov

SECTION I

I NOTICE

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

The Four Rivers Sanitation Authority will receive sealed, signed bids for **Final Clarifiers #7 & #8 Rehab** at the Authority's offices, 3501 Kishwaukee Street, Rockford, IL 61109 until 2:00 p.m. July 12, 2022. The public bid opening will take place in person and may be accessed remotely with the following information: From your computer, tablet or smartphone: https://meet.goto.com/527581309. You can also dial in using your phone. United States: +1 (224) 501-3412. Access Code: 527-581-309

The purpose of this project is to rehab both final clarifiers #7 and #8, specifically sandblasting and painting the metal structures that currently exist within the tanks including the catwalks, intake tubes, baffle ring, and other metal supporting structures.

A **MANDATORY** pre-bid meeting will be held on June 30, 2022 at 10:00 a.m. in the Board Room of the Graceffa Administration Building at 3501 Kishwaukee Street, Rockford, IL 61109.

Copies of the Invitation to Bid for review purposes only are available through the Four Rivers Sanitation Authority web site, fourrivers.illinois.gov. Bid documents for submittal are available by contacting Purchasing at MRoach@fourrivers.illinois.gov or (815) 387-7425.

Each bid must be accompanied by cash, a certified or bank cashier's check on a solvent bank or trust company, drawn to the order of the Four Rivers Sanitation Authority, or an acceptable Bid Bond along with the Bid Bond form attached, in an amount not less than ten percent (10%) of the total bid price. This sum is a guarantee that, if the bid is accepted, a contract will be entered into and its performance properly secured.

Request for information related to this bid should be directed to Greg Cassaro, Director of Plant Operations of the Four Rivers Sanitation Authority, 3501 Kishwaukee St., Rockford, IL, 61109; telephone 815-387-7605.

No bid is to be withdrawn after the opening of bids without consent of the Four Rivers Sanitation Authority for a period of sixty (60) days after the closing time of receipt of bids.

The Four Rivers Sanitation Authority reserves the right to reject any or all bids, or any part thereof, or to accept any or all bids, or any part thereof, or to waive any formalities in any bids, deemed in the best interest of the Four Rivers Sanitation Authority.

The Authority will confirm any award decision in writing, to the successful bidder.

Julia Scott-Valdez

Director of Management Services Four Rivers Sanitation Authority

SECTION II GENERAL SPECIFICATIONS & INSTRUCTIONS

II GENERAL SPECIFICATIONS & INSTRUCTIONS

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

2.1 Bid Preparation

Where applicable, bidder must submit their bid on the forms the Authority provides in this document. **The bidder must complete all applicable blanks**. They may submit additional information as they believe necessary on their stationery, under signature of the authorized representative who completes this document's forms.

If this Invitation to Bid contains inconsistencies or contradictions between sections, Section III - Detailed Specifications supersede Section II - General Specifications, which supersede Section I - Notice. No warranty is made or implied as to information contained in these specifications.

An authorized officer or individual must sign the bid. The Authorized signature must be the individual owner of a proprietorship, a general partner of a partnership, or the corporation officer who is authorized to sign for a firm and whose title is affixed.

All prices and notations must be in ink or typewritten. The bidder may cross out mistakes and type corrections adjacent to the point of error. The person who signs the bid must initial such corrections, in ink. If the Authority finds a bidder's entry to be illegible, it may, at its sole discretion, reject the bid.

2.2 Submission of Bids

The Authority will not receive bids in electronic format, by e-mail or internet or by facsimile. The bidder must return their bid in a sealed envelope, clearly marked as BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB. The Authority cannot ensure that the sealed bid will not be prematurely opened if the bidder does not clearly identify their bid envelope.

Bids should be addressed to:
Four Rivers Sanitation Authority
3501 Kishwaukee Street
Rockford, IL 61109

If the bidder chooses to hand-deliver their bid, they must deposit it at the Graceffa Administration Building main lobby Bid Box or handed to the Customer Service receptionist, 3501 Kishwaukee Street, Rockford, IL 61109 between the hours of 8:00 A.M. and 4:30 P.M., Monday through Friday, except for holidays.

2.3 Bid Security

Each bid must be accompanied either by cash, an <u>original</u> certified or bank cashier's check on a solvent bank or trust company, or a bidder's bond (<u>form attached</u>) from acceptable surety, drawn to the order of the Rock River Water Reclamation District in an amount of not less than ten percent (10%) of the bid price, issued by a surety company licensed to conduct business in the State of Illinois and named in the current list of "Surety Companies Acceptable On Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department. Failure to provide a Bid Security in the amount specified will constitute sufficient cause for rejection of the bid.

Within three (3) days after the opening of bids, the bid securities of all but the three lowest bidders will be returned. The bid security of the remaining two unsuccessful bidders will be returned within three (3) days after the execution of the contract, or, if no such contract has been executed, within sixty (60) days after the date of opening of bids. The bid security of the successful bidder will be returned only after he has duly executed the contract and furnished the required insurance.

2.4 Performance Bond and Payment of Vendor Bond

The successful bidder shall provide a Performance Bond and Payment of Vendor Bond acceptable to the Rock River Water Reclamation District. The performance bond shall be for either 100% of the annual contract price or for the successful bidder's unit price times the estimated number of units, as applicable. The performance bond shall be submitted annually on or before its expiration date, and within 10 business days of the award anniversary date for the entire length of the Contract period.

This Invitation to Bid contains a Performance Bond form and Payment of Vendor Bond for the successful bidder's use.

If the successful bidder fails to provide acceptable bonds within the specified time he shall be in default.

2.5 Illinois Department of Human Rights Registration Number

All bidders inside and outside of Illinois must provide an Illinois Department of Human Rights Registration Number at the time bids are due. This number must be written or typed on the line in the Fair Employment Affidavit of Compliance (included in this document). The following link may be used to access the website where the number can be obtained: https://www2.illinois.gov/dhr/PublicContracts/Pages/default.aspx

Taxes This Authority is exempt, by law, from paying bidder Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the bidder must exclude those taxes from their bid. The Authority's tax exemption number is E9992-3696. The bidder must include all applicable taxes in their bid price.

2.7 Withdrawal of Bids

At any time prior to the scheduled bid opening, the bidder may withdraw their bid. In order to do so, they must submit a written request to the Director of Management Services.

2.8 Acceptance of Bid

The Authority may reject all or part of any or all bids, for any reason. The Authority may accept all or part of any bid or waive any bidding formalities if it decides such action is in the Authority's best interest.

The Authority will only consider bids that conform to the intent of this document. The Authority will reject bids that contain one or more exceptions if the Authority determines that non-conforming bids deviate from the intent of these specifications. The Authority's decision is final, and the Authority's procurement procedures contain no appeal provision.

2.9 Laws and Regulations

The bidder who is awarded the contract must comply with all laws of the United States of America, the State of Illinois, and all lawful regulations of the Four Rivers Sanitation Authority and the respective cities and villages in which the service, material or equipment supplied is to be performed respecting labor and compensation and all other statutes, ordinances, rules and regulations applicable and having the force of the law.

A. Illinois Regulations

 Prevailing Wage - Public Act 100-1177 (820 ILCS 130) requires the Bidder to comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on Authority projects to submit certified payroll reports via the State's Certified Transcript of Payroll Portal currently found at:

https://www2.illinois.gov/idol/Laws-rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx.

The Bidder is responsible for verifying current information at the State's website.

- 2. Public Act 96-929 (30 ILCS 570) provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and, further, that Illinois workers are available and capable of performing the particular type work involved.
- 3. Public Act 101-0221 requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
 - a. the illegality of sexual harassment
 - b. the definition of sexual harassment under Illinois State law
 - c. a description of sexual harassment, utilizing examples
 - d. my (our) organization's internal complaint process including penalties
 - e. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
 - f. directions on how to contact the Department and the Commission
 - g. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

Upon request, this information must be provided to the Illinois Department of Human Rights and AUTHORITY.

- 4. With regard to nondiscrimination in employment, the Contractor for this project will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations.
- The Contractor for this project must comply with the Occupational Safety and Health Act.
- 6. The Contractor for this project must comply with the Federal Drug-Free Workplace Act.
- 7. Americans with Disabilities Act The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Four Rivers Sanitation Authority (AUTHORITY) and their representatives from all:
 - a) suits, claims, or actions
 - b) costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement
 - c) damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

2.10 Terms

- **A. Payments to the Successful Bidder**. If the Authority receives an acceptable invoice for conforming materials or service prior to the fifth day of the month, the Authority will issue payment before the fifth day of the succeeding month. If received on or after the fifth day of the month, payment will be issued the following month.
- **B. Default**. In case of default, the Authority will procure the materials or service described in this Invitation to Bid from other sources. The Authority will hold the defaulting successful bidder responsible for any excess cost incurred. The defaulting successful bidder must make such payment no more than sixty (60) calendar days after the Authority notifies them, in writing, of such an occurrence.
- **C, Delivery Hours**. Unless otherwise specified, all items must be delivered to: Four Rivers Sanitation Authority, 3333 Kishwaukee Street, Rockford, Illinois, Monday through Friday, between the hours of 7:30 A.M. and 3:00 P.M., excluding holidays.

In the unlikely event that the Authority is picketed by its employees or by a third party, or if any labor-management dispute between the Authority and its employees or third parties becomes known to the successful bidder, then in such event and during the course of any such picketing or labor-management dispute, the successful bidder must continue to carry out the terms and conditions of this contract as if such pickets were not present or such labor-management dispute did not exist.

Time of delivery is part of the Authority's consideration of each bid.

D. F.O.B. Point and Shipping Charges. All prices must be quoted F.O.B. destination, Four Rivers Sanitation Authority, 3333 Kishwaukee St., Rockford, Illinois, 61109. All shipping, handling and freight charges must be included in the bid amount.

E. Use of the Authority Name Prohibited. In the absence of the Authority's written permission, the successful bidder must not use the Authority's name in any form or medium of public advertising.

2.11 Quantities Estimated Only

The estimated quantities of the various items of work and materials, as set forth in the bid form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that they will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work performed.

2.12 Investigation

It is the responsibility of the bidder to make any and all investigations necessary to become thoroughly informed of what is required and specified in the bid document. No plea of ignorance by the bidder of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the bidder to make necessary examinations and investigations will be accepted on a basis for varying the requirements of the Authority or the compensation of the bidder.

2.13 Addenda and Interpretation

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. Every request for such interpretation must be in writing addressed to the Four Rivers Sanitation Authority, 3501 Kishwaukee Street, Rockford, Illinois. Any and all such interpretations and any supplemental instructions will be in the form of written addenda. To be given consideration, such request must be received at least five (5) days prior to the proposal due date.

If the Authority issues written addenda, such addenda become part of the contract documents. Not less than three (3) business days prior to the bid opening date, the Authority will post the addenda, if any, on its website at fourrivers.illinois.gov, and distribute the addenda via email to each recipient of the specifications, at either the:

- Email address to which the Authority emailed the original bid document; or
- Corrected email address prospective bidder furnished

A bidder that does not receive the Authority's addenda, and who has previously submitted a bid, is not relieved from any obligation in the bid they submitted.

2.14 Contract Form

No more than ten (10) business days following the contract award, the successful bidder

must submit a completed Contract Form to the Authority's Director of Management Services. The Contract Form is part of this Invitation to Bid. If the successful bidder fails to complete the Contract Form within the specified time, they are in material default.

2.15 Contract Termination

A. Bidder's Unacceptable Performance. If the successful bidder fails to perform services or provide materials in conformity with this Invitation to Bid, the Authority will notify them in writing. If the successful bidder fails to correct the performance deficiency to the Authority's satisfaction within five (5) working days after they receive the Authority's notice, they are in default. If the same performance deficiency recurs despite the Authority's notification and the successful bidder's temporary correction, the successful bidder is likewise in default. The Authority may, at its sole discretion, terminate the FINAL CLARIFIERS #7 & #8 REHAB contract with the defaulting successful bidder, and remedy the matter under provisions set forth in Section 2.10B of this Invitation to Bid.

- **B.** Authority's Action Following Contract Termination. If the contract is terminated, the Authority may, at its sole option:
 - 1. request new FINAL CLARIFIERS #7 & #8 REHAB bids or
 - 2. designate the next-low bidder to perform the **FINAL CLARIFIERS #7 & #8 REHAB** contract, provided that said next-low bidder agrees to their original bid terms.

The Authority may repeat this option until it obtains an acceptable **FINAL CLARIFIERS #7 & #8 REHAB** contract.

2.16 "No Bid" Response Form

In the event you elect not to bid, please fill out and return the attached "No Bid" form.

2.17 Indemnification Clause

To the fullest extent provided by law, successful bidder must protect, indemnify, hold and save harmless and defend the Authority, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the successful respondent/ contractor or Authority, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance by the successful respondent/contractor or subcontractor, whether such loss, damage, injury, or liability is contributed to by the negligence of the Authority or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful respondent/contractor to have no liability for damages or the costs incident thereto caused by the sole negligence of the Authority.

The indemnification must not be limited by a limitation on amount or type of damages payable by or for the successful respondent/contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers' Compensation Act.

No inspection by the Authority, its employees, or agents is deemed a waiver by the Authority of full compliance with the requirements of the Contract. This indemnification must not be limited by the required minimum insurance coverage in the Contract.

2.18 Force Majeure

The obligations of either the Authority or the successful bidder is suspended during the time as such party is prevented from complying therewith in whole or in part because of any cause, except financial, beyond the reasonable control of such party. In the event of either the Authority or the successful bidder being rendered unable wholly or in part by force majeure to carry out its obligations under the contract, other than to make payments due, it is agreed that on such party giving notice and full particulars of such force majeure in writing to the other party as soon as possible after the occurrence of the cause relied on, then the obligations of the parties insofar as they are affected by such force majeure are suspended during the continuance of any inability so caused but for no longer period, and such cause must as far as possible be remedied with all reasonable dispatch.

2.19 Insurance

A. The successful respondent/contractor, for the duration of the contract, must maintain the following:

General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit must apply separately to this project or the general aggregate limit must be twice the required occurrence limit.

Auto Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non-owned vehicles, as applicable.

Workers' Compensation and Employers' Liability: Workers' Compensation limits as required by statute and Employers' Liability limits of \$500,000 per accident and \$500,000 per disease.

Umbrella: \$2,000,000 per occurrence/aggregate.

The policies must contain, or be endorsed to afford Contractual Liability coverages for the following provisions in the General Liability and Automobile Liability coverages:

- 1. The Authority, its officers, officials, employees, and volunteers must be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the successful respondent/contractor, products and completed operations of the successful respondent/contractor, premises owned, occupied or used by the successful respondent/contractor, or automobiles owned, leased, hired, or borrowed by the successful respondent/contractor. The coverage must contain no special limitations on the scope of protection afforded to the Authority, its officers, officials, employees, volunteers, or agents.
- 2. The successful bidder's/contractor's insurance coverage must be primary insurance as respects the Authority, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by the Authority, its

- officers, official employees, volunteers, or agents must be in excess of the successful respondent's/contractor's insurance and must not contribute with it.
- 3. Any failure to comply with reporting provisions of the policies must not affect coverage provided to the Authority, its officers, officials, employees, volunteers, or agents.
- 4. The successful respondent's/contractor's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- **B.** Proof of Insurance Certificate of Insurance. No more than ten (10) calendar days subsequent to the Authority's issuance of an award letter and no later than thirty (30) days before commencement to work, the successful respondent/contractor must provide documentation including a Certificate of Insurance, and primary, non-contributory additional insured endorsements for general and auto liability to prove that it has obtained all required insurance and bonds. The Certificate of Insurance must state Four Rivers Sanitation Authority is additional insured under the commercial general liability and automobile liability on a primary, non-contributory basis. The primary, non-contributory additional insured endorsements for commercial general liability and automobile liability must be provided. The Authority is the sole judge as to the acceptability of any such proof.
- **C.** Correction of Successful Bidder's Insurance Deficiencies. If the Authority determines that the successful bidder's insurance or documentation does not conform to these specifications, the Authority to inform said bidder of the non-conformity. If said bidder fails to provide conforming insurance or documentation within five (5) calendar days of the Authority's notice, they are in default.

D. Best's Ratings.

- **1.** Alphabetical Rating. For purposes of this Request for Bids, "insurer" means any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the successful respondent/contractor. No insurer or surety rated lower than "A-," **Excellent**, in the current <u>Best's Key Rating Guide</u> is acceptable to the Authority.
- **2. Financial Size Rating.** Provided an insurer's alphabetical rating is satisfactory, the Authority will examine said insurer's financial size rating.
 - a) If <u>Best</u> classifies the insurer XII or larger, said insurer is acceptable to the Authority.
 - (b) If <u>Best</u> classifies the insurer as smaller than XII, but larger than VI, said insurer must be submitted to the Authority's Director of Management Services and/or the Authority's insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the respondent/contractor.

E. Suitability of Insurance. The Authority is the sole judge of whether an insurer's rating is satisfactory. The Authority's decision is final and the Authority's bidding procedures contain no appeal provision.

2.20 Responsive/Responsible Bidder

A. Evaluation of Responsiveness. The responsiveness of bidders will be judged on the basis of the completeness of the bid submitted. To be responsive, a Bid must be submitted on the forms provided as part of the Bid Documents and comply with all the requirements of the Invitation to Bid.

B. Evaluation of Responsibility. To be judged as responsible, the bidder must:

- Have adequate financial resources for performance, the necessary experience, organization, technical qualifications, and facilities, or a firm commitment to obtain such by subcontracts;
- 2. Be able to comply with the required completion schedule for the project;
- 3. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from the Authority;
- 4. Have an adequate financial management system and audit procedures, that provide efficient and effective accountability and control of all property, funds, and assets;
- 5. Conform to the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.

SECTION III DETAILED SPECIFICATIONS

III DETAILED SPECIFICATIONS

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

3.1 Purpose

It is the purpose of this document to specify minimum requirements the successful bidder must meet for the Authority to obtain **FINAL CLARIFIERS #7 & #8 REHAB**.

3.2 Scope

The scope of this project is to rehab both final clarifiers #7 & #8, specifically sandblasting and painting the metal structures that currently exist within the tanks including the catwalks, intake tubes, baffle ring, and other metal supporting structures.

Both clarifiers #7 & #8 are original equipment and have never undergone rehab. The catwalks, intake tubes, baffle ring, and support structures are showing clear signs of age and aesthetic deterioration. The ultimate goal of this rehab project will be to extend the service life of both tanks of upwards of 10-20 years.

3.2 Minimum Requirements

- A. A **MANDATORY** pre-bid meeting will occur on Thursday, June 30, 2022 at 10:00 a.m. Contractors that do not attend the mandatory pre-bid meeting shall be prohibited from submitting a bid.
- B. Both tanks #7 & #8 will be drained and cleaned prior to work commencing. Tanks shall be rehabbed one at a time so FRSA will have the ability to continue use of the tank that is not being rehabbed. At no time will both tanks be out of service at the same time. The draining and cleaning of the tank shall be performed by FRSA staff.
- C. All metal surfaces including catwalks, intake tube, baffle ring, and support structures shall be media blasted and rust mitigated up to 18" below the normal operating water line of each tank as necessary. Any removal and replacement of steel structures including catwalk treads, support beams, and hardware shall be the responsibility of the contractor. All coatings shall color match existing.
- D. All work shall be performed Monday through Friday, 6 AM 7 PM, FRSA holidays and weekend work shall be allowed with prior approval.
- E. The following product submittal including steel immersion service and steel atmospheric service, product information, product application specifications, service preparations, application conditions, application equipment, and all other procedures must be followed per the attachment.
- F. The products used must be the same or equal to those in the attached product submittal. Bidder must state the same or equivalent product in their bid and provide a product submittal with their bid.
- G. All work shall be completed by December 1, 2022.

3.3 Fees

All bids must include all fees associated with the purchase including any shipping, delivery or doc fees.

3.4 Warranty

All bids must include a 5-year warranty on parts and labor.

3.5 Payments to the Successful Bidder

Section 2.10A of this Invitation to Bid contains the Authority's general payment requirements.

3.6 Questions

Interested parties may direct questions concerning this Invitation to Bid to Dave Tassoni, Plant Operations Division Manager at 815-387-7675. The Authority will not interpret specifications for individual bidders. If the Authority determines that the specifications need to be clarified or revised, it will issue an addendum to all prospective bidders.

SECTION IV BID FORM

IV BID FORM

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

To: BOARD OF TRUSTEES	From:	
FOUR RIVERS		(Individual, Partnership or Corporation
SANITATION AUTHORITY		
3501 KISHWAUKEE ST.		
ROCKFORD, IL 61109		
	(Addı	ress of Individual, Partnership or Corporation

Trustees:

I (We) the undersigned hereby propose to furnish the **FINAL CLARIFIERS #7 & #8 REHAB** in compliance with the attached Introduction, General Specifications and Instructions, Detailed Specifications, Bid Form, Fair Employment Practices Affidavit of Compliance Form, Forms of Affidavit, and Contract Form.

The Undersigned also affirms and declares:

- A. That they have examined and are familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
- B. That they have carefully examined the scope of the required service, materials or equipment supplied, and that, from their own investigation, have satisfied themselves as to the nature and location of the delivery point, the character, quality and quantity of materials, and the kind and extent of equipment and other facilities needed for the performance of the service and provision of the materials, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, affect the services, materials, or equipment or their performance.
- C. That this bid is made without any understanding, contract or connection with any other person, partnership, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that they are not barred from submitting a bid as a result of a bid-rigging or bid-rotating conviction.
- D. All goods and services provided in response to this request will be produced in compliance with all applicable requirements of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor.
- The firm which I (we) represent complies with all applicable requirements of the Americans with Disabilities Act (ADA), the Occupational Safety and Health Act (OSHA), rules and regulations of the US Department of Transportation (DOT), and the Federal Drug Free Work-Place Act. If said firm is awarded a contract to provide the Authority's **FINAL CLARIFIERS #7 & #8 REHAB**, it will:
 - 1. complete all OSHA, ADA, and DOT required supervisory, employee and customer training.
 - 2. document compliance as required,
 - 3. ensure that persons in safety-sensitive positions associated with loading, transportation, and delivery of the merchandise or service detailed in these

- specifications are subject to all required drug and alcohol testing and are properly licensed.
- 4. prepare and make available all required information and documentation, and
- 5. hold harmless and indemnify the Authority and the Authority's representatives as defined in Section 2.17 from all:
 - a. Suits, claims, or actions;
 - Costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlements, and;
 - c. Damages of any kind (including but not limited to fines, actual, punitive, and compensatory damages) relating in any way to or arising out of the ADA or the OSHA, to which said firm is exposed or which it incurs in the execution of the contract.
- F. The firm which I (we) represent has adopted and promulgated written sexual harassment policies that include, at a minimum, the following information:
 - 1. the illegality of sexual harassment;
 - 2. the definition of sexual harassment under Illinois State Law;
 - a description of sexual harassment, utilizing examples;
 - 4. my (our) organization's internal complaint process including penalties;
 - 5. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
 - 6. directions on how to contact the Department and the Commission; and
 - 7. protection against retaliation as provided by Section 6-101 of Illinois Human Rights Act. (775 ILCS 5)

Upon request, my (our) organization will provide the Illinois Department of Human Rights with the information described in F1 through F7 above.

In submitting this bid, I (we) agree that I (we) are not withdraw this bid for a period of sixty (60) calendar days following the scheduled bid opening. I (we) have carefully examined the nature of the service, materials, and equipment. The cost of all the service, materials, and equipment necessary to complete this contract is given in this bid.

The selected proposer is to enter into a Contract with the Authority to complete the Project in a form substantially similar to the Contract attached hereto. The Contract must be executed by the Contractor/Vendor and returned, together with the Insurance Documents and Performance Bond (if applicable) within ten (10) calendar days after it has been mailed to the Contractor. Two copies of the contract must be executed by the Contractor. One fully executed copy will be returned to the Contractor. See Section VIII for a sample copy of the agreement.

BID FORM CONT'D.

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB AS SPECIFIED IN THIS INVITATION TO BID

Failure to complete this form will result in disqualification of Vendor's bid

Price, expressed in figures <u>and</u> words, to provide **labor and materials** to Four Rivers Sanitation Authority, for the completion of **FINAL CLARIFIERS #7 & #8 REHAB**, in conformity with all specifications in this invitation to bid:

Labor and Materials Total expressed in fig	ures: \$
Labor and Materials Total written:	dollars and
The basis of award is the responsive, responsive and materials for FINAL CLARIFIERS #7 & # that Addendum numbers,, we are considered part of the Contract.	*8 REHAB. The undersigned acknowledges
Date:	
By signing this bid, I/we, the bidder(s), agree	e to the terms of the bid, bid requirements,
addenda, and contract.	
Bidder:(Print Name of Firm)	By:(Authorized Rep's Signature)
(Print Street Address)	(Print Rep's Name)
(Print City, State, Zip)	(Print Rep's Title)
(Area Code and Phone Number)	(Facsimile Number)

NOTE: The Four Rivers Sanitation Authority, a Governmental Unit, pays neither Federal Excise Tax nor Illinois Retailers' Occupational Tax. The bidder must exclude those taxes from their bid.

"NO BID" RESPONSE TO INVITATION TO BID

If your firm is unable to submit a bid at this time, would you please provide the information requested in the space provided below and return to:

Four Rivers Sanitation Authority 3501 Kishwaukee Street Rockford, IL 61109

For this form only, responses can also be emailed to:

mroach@fourrivers.illinois.gov

We have received Invitation to Bid: **FINAL CLARIFIERS #7 & #8 REHAB**, opening July 12, 2022 at 2:00 p.m.

Reason for not bidding:		
	BY:	
		Signature
		Name & Title, Typed or Printed
		Company Name

SECTION V FAIR EMPLOYMENT AFFIDAVIT OF COMPLIANCE

V

FAIR EMPLOYMENT PRACTICES AFFIDAVIT OF COMPLIANCE

Failure to complete this form will result in disqualification of Vendor's bid.

FINAL CLARIFIERS #7 & #8 REHAB

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE FOUR RIVERS SANITATION AUTHORITY CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

	, being first duly sworn, deposes and says that:
(Name of person making affidavit)	
They are:	of (Company Name)
(Officer's Title)	(Company Name)
that said company is and "Equal Opportunity Employer annotated and Federal Executive Orders #11375 which a	r" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code are incorporated herein by reference;
and that said company will comply with any and all requi Clause, Rules and Regulations, Illinois Department of Hu	irements of Title 44 Admin. Code 750. APPENDIX A – Equal Employment Opportunity uman Rights, which read as follows:
be declared ineligible for future contracts or subcontract	provisions of this Equal Employment Opportunity Clause or the Act, the contractor may swith the State of Illinois or any of its political subdivisions or municipal corporations, or in part, and other sanctions or penalties may be imposed or remedies invoked as see of this contract, the contractor agrees as follows:
orientation, marital status, order of protection status, nat to ability, military status or an unfavorable discharge fr	r employee or applicant for employment because of race, color, religion, sex, sexual tional origin or ancestry, citizenship status, age, physical or mental disability unrelated om military service; and, further, that he or she will examine all job classifications to d and will take appropriate affirmative action to rectify any underutilization.
availability (in accordance with this Part) of minorities an	rder to perform this contract or any portion of this contract, he or she will determine the id women in the areas from which he or she may reasonably recruit and he or she will hired in a way that minorities and women are not underutilized.
will be afforded equal opportunity without discrimination b	loyees placed by him or her or on his or her behalf, he or she will state that all applicants lecause of race, color, religion, sex, sexual orientation, marital status, order of protection ge, physical or mental disability unrelated to ability, military status or an unfavorable
bargaining or other agreement or understanding, a notice the Act and this Part. If any labor organization or repres	tion or representative of workers with which he or she has or is bound by a collective e advising the labor organization or representative of the contractor's obligations under centative fails or refuses to cooperate with the contractor in his or her efforts to comply orify the Department and the contracting agency and will recruit employees from other e-contract.
5) That he or she will submit reports as required by Department or the contracting agency, and in all respects	this Part, furnish all relevant information as may from time to time be requested by the s comply with the Act and this Part.
	ooks, records, accounts and work sites by personnel of the contracting agency and the mpliance with the Act and the Department's Rules and Regulations.
of the contract obligations are undertaken or assumed, s with other provisions of this contract, the contractor will b further it will promptly notify the contracting agency and	nce the provisions of this clause in every subcontract awarded under which any portion so that the provisions will be binding upon the subcontractor. In the same manner as the liable for compliance with applicable provisions of this clause by subcontractors; and the Department in the event any subcontractor fails or refuses to comply with the subcontractor declared by the Illinois Human Rights Commission to be ineligible for of its political subdivisions or municipal corporations.
(Source: Amended at 35 III. Reg. 3695, effective February	
IL Dept of Human Rights Registration No.:	Expiration Date:

Subscribed and sworn to before me this ______ day of ______, 20____.

Notary Public _____

Signature_

SECTION VI FORMS OF AFFIDAVIT

VI FORMS OF AFFIDAVIT

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

Failure to complete this form will result in disqualification of Vendor's bid.

Bidder City:	Bidder	County	:		_ Bidder :	State:		
This Section for Sole Propri	etorship:							
I		(name) l	beina d	lulv swor	n denose	and sav	that the	
organization I represent is a s								
the foregoing bid and that the								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		0. (
This Section for Partnership								
l,	(name), bei					at I am a escribed in		
executed the foregoing bid; th	at I duly subscri							
that the several matters there					ruiciduni	o on bone	01 1110	iiiii, ana
		o.¹	ature _					
This Section for Corporation				X				
We,		(repres	sentativ	ve who	sianed	the E	3id Fo	rm), and
•	(other co	rporate	officer)	being o	duly swor	n, depose	and s	ay that we
reside in the cities of we are the	· · · · · · · · · · · · · · · · · · ·	and				, res	pectivel	y, and that
(other corporate officer's title),	respectively of	presenta	tive's t	itie) and	tne			corporation
name), the firm described in	and which ex	ecuted t	he fore	egoing in	strument:	that we	are au	thorized to
complete this form and to en	ter into this con	tract on	behalf	of said	corporation	n; that w	e have	signed our
names thereto by like order; a	nd that we have	knowled	dge of t	he sever	al matters	s therein s	tated ar	าd they are
in all respects true.								
(representative's signature)			(other	corporate	e officer's	signature		
This Section for a Limited L	iability Corpora	 ation:	_`					
l,								I am a
name), the company describe	esentativè's titlé)	of	al 4la a £a					_(company
this form and to enter into this	ed in and which contract on beha	executed	a the to	oregoing	bia; that i	l am autho	be seve	o complete
therein stated and they are in	all respects true	iii 0i 5ai0 !.	Compa	arry arru i	iave Kilov	vieuge oi i	lie seve	iai malleis
	·							
		Signa	ature _					
Notarization (required for al	l successful bio	dders):						
Subscribed and sworn to befo	re me this	day	of			, 20		<u></u> .
Notary Public								
County								
My Commission Expires								

SECTION VII BID BOND

VII BID BOND FOUR RIVERS SANITATION AUTHORITY ROCKFORD, ILLINOIS FINAL CLARIFIERS #7 & #8 REHAB

KNOW ALL MEN BY THESE PRESENT, that we: (hereinafter called the Principal) and (hereinafter called the Surety) a Corporation chartered and existing under the laws of the State of with its principal offices in the City of and authorized to do business in the State of Illinois are held and firmly bound onto the Four Rivers Sanitation Authority of Winnebago County, Illinois (Authority), in the full and just sum of: Dollars ___) good lawful money of the United States of America, to be paid upon demand of the District, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents. WHEREAS, the Principal is about to submit, or has submitted to the District, a bid for providing FINAL CLARIFIERS #7 & #8 REHAB. WHEREAS, the Principal desires to file this bond, in accordance with law, in lieu of a certified

bidder's check otherwise required to accompany this Bid.

N TESTIMONY THEREOF, the	e Principal and Su	irety have caused these presents to be
luly signed and sealed this	_ day of	, 20
Seal)	 Ву	Principa
	Name:	
	Title: _	<u>S</u>
TTEST:	Date: _	28
	D	
Seal)	Ву	Surety
	Name:	
27/	Title: _	
2	Date: _	

SECTION VIII CONTRACT SAMPLE

VIII CONTRACT FOUR RIVERS SANITATION AUTHORITY FINAL CLARIFIERS #7 & #8 REHAB

THIS CONTRACT, made and concluded this day of	, 20	_,
between the Four Rivers Sanitation Authority, Illinois, also known as		
their executors, administrators,	successors	or
assigns, known as "Contractor":		
In consideration of the payments and contracts mentioned in the Bid attachmade and performed by the Authority, the Contractor agrees with the Authority proper cost and expense to do all the work, furnish all equipment, materinecessary to complete the work and furnish the merchandise in accompeditions hereinafter described, and the Authority's requirements.	ority at their als and all la	own abor
1. Scope Both parties understand and agree that the Introduction, General Sp Instructions, Detailed Specifications, Bid Form, Fair Employment Pract Compliance Form, and Forms of Affidavit of the Invitation to Bid: FINAL C & #8 REHAB, all Addenda there to (if any), and any and all provisions requall essential documents of the contract, and are a part hereof, as if herein or as if attached, except for titles, subtitles, headings, table of content specifically excluded.	ices Affidav CLARIFIERS uired by law, set out verba	rit of S #7 , are atim
The Successful Bidder must provide the Authority's FINAL CLARIFIERS and including delivery, at the bid price, and a 5-year warranty from date of final the Authority.		
2. Contract Price		
The Authority will pay to the Contractor, and the Contractor will accept, in the performance of this Contract, subject to any additions or deductio hereby, in current funds, the total contract price of:		
(\$	<u>)</u> .	
The Contractor fully understands and agrees that their bid price, deliver Kishwaukee St., Rockford, IL will be the only basis for payment for the cor and that in the absence of changes to which the Authority and Contractor of revisions to the scope of the FINAL CLARIFIERS #7 & #8 REHAB , this for no price increases.	ntract's dura [.] agree beca	tion, ause

The Authority will make payments to the Contractor, in accordance with and subject to the provisions of Section 4 of this Contract.

Page | 30

3. Contract Execution

The Contractor must:

- **A.** Perform all services in a responsible manner, supplying only service, materials, or equipment that meets or exceeds the Authority's specifications;
- B. Provide FINAL CLARIFIERS #7 & #8 REHAB in conformity with the specifications;
- **C.** Sustain all loss or damage arising out of the nature of the work to be done, or from any unforeseen obstruction or difficulty which they may encounter in the prosecution of the work, or from the action of the elements;
- **D.** Be responsible for all accidents they, their employees, or agents may incur in the contract's execution;
- E. Hold the Authority and its representatives harmless from liability of any nature or kind on account of use of any copyrighted or un-copyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used under this Contract. The Contractor must likewise hold harmless and indemnify the Authority and its representatives from all:
 - 1. suits, claims, or actions,
 - 2. costs, either for defense or for settlements, and
 - 3. damages to which the Authority or its representatives might be exposed by reason of an injury or alleged injury, to the person or property of another:
 - a. in the execution of the Contract, or
 - b. from actions the Authority or its representatives take on the Contractor's behalf, except in cases where such suits, claims, actions, or costs are found to be based on the Authority's negligence. For purposes of this paragraph, "its representatives" means "the Four Rivers Sanitation Authority's trustees, employees, agents, assigns, and their heirs;"
- **F.** Comply with all applicable requirements of the Americans with Disabilities Act (ADA), the Occupational Safety and Health Act (OSHA), rules and regulations of the US Department of Transportation (DOT), and the Federal Drug Free Work Place Act, and will:
 - complete all OSHA, ADA, and DOT required supervisory, employee and customer training,
 - document compliance as required,
 - ensure that persons in safety-sensitive positions associated with loading, transportation, and delivery of the merchandise or service detailed in these specifications are subject to all required drug and alcohol testing and are properly licensed.
 - 4. prepare and make available all required information and documentation, and
 - 5. hold harmless and indemnify the Authority and the Authority's representatives as defined in Section 2.17 from all:
 - a. Suits, claims, or actions;
 - b. Costs, either for defense (including but not limited to reasonable attorney's

- fees and expert witness fees) or for settlements, and;
- c. Damages of any kind (including but not limited to fines, actual, punitive, and compensatory damages) relating in any way to or arising out of the ADA or the OSHA, to which said firm is exposed or which it incurs in the execution of the contract.
- **G.** Adopt and promulgate written sexual harassment policies that include, at a minimum, the following information:
 - 1. the illegality of sexual harassment;
 - 2. the definition of sexual harassment under Illinois State law;
 - 3. a description of sexual harassment, utilizing examples;
 - 4. Contractor's internal complaint process including penalties;
 - 5. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
 - 6. directions on how to contact the Department and the Commission; and
 - 7. protection against retaliation as provided by Section 6-101 of Illinois Human Rights Act.

Upon request, Contractor will provide the Illinois Department of Human Rights with the information described in G1 through G7 above.

- **H.** Maintain all specified insurance for the duration of the contract.
- I. The Steel Products Procurement Act, Illinois Public Act 83-1030, requires that steel products used or supplied in performance of this Contract or subcontract must be manufactured or produced in the United States with three exceptions, as explained in the Instructions to Bidders.
- **J.** In the absence of the Authority's written permission, the Contractor must not use the Authority's name in any form or medium of public advertising.
- **K.** This Contract must extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

In consideration of and to induce the award of this Contract to them, the Contractor represents and warrants: that they are not in arrears to the Authority upon debt of the Contract and that they are not a defaulter, as surety, contractor or otherwise; that they are financially solvent and sufficiently experienced and competent to perform the work; that the work can be performed as called for by the Contract; that the facts stated in their bid and the information given by them is true and correct in all respects, and that they are fully informed regarding all the conditions affecting the work to be done and labor and materials to be furnished for the completion of this Contract and that their information was secured by personal investigation and research.

If the Contractor defaults, the Authority may procure **FINAL CLARIFIERS #7 & #8 REHAB** described in this Invitation to Bid, from other sources. In such an event, the price the Authority pays constitutes the prevailing market price at the time of such

purchase and the defaulting Contractor must pay the Authority the difference between their bid price and the prevailing market price. The defaulting Contractor must make such payment no more than 60 calendar-days after the Authority notifies them, in writing, of such an occurrence.

4. Payments to Contractor

If the Authority receives an acceptable invoice for conforming service prior to the fifth day of the month, the Authority will issue payment before the fifth day of the succeeding month. If received on or after the fifth day of the month, payment will be issued the following month.

5. Subcontracts

No part of the work herein provided for is to be sublet or subcontracted without the express written consent of the Authority, and in no case will consent relieve said Contractor from the obligation herein entered into, or change the terms of this Contract.

6. Contractor's Responsibility

This Contract must extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

7. Counterparts

This Agreement may be executed and recorded in counterparts, each of which is to be deemed an original and all of which, when taken together, constitutes one and the same instrument. The Parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format must be legal and binding and must have the same full force and effect as if an original of this Agreement had been delivered. Each of the parties (a) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (b) are aware that the other party will rely on such signatures, and (c) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signature.

8. Time

The Contractor agrees to all delivery schedules specified in the Invitation to Bid.

a	Sea	le
.7.	SEA	-

•	es have hereunto set their hands, and are duly on behalf of their respective organizations.
	Name of Firm - Contractor
	ByAuthorized Signature
ATTEST:	7 total on 200 oliginates
By:	
	Four Rivers Sanitation Authority Winnebago County, Illinois
Ву	
	Executive Director
ATTEST: Director of Management Se	ervices
STATE OF ILLINOIS COUNTY OF WINNEBAGO	
County, personally appeared Timothy Sknown, who, being each by me duly sw	before me, a notary public within and for said S. Hanson and Julia Scott-Valdez, to me personally forn did say that they are respectively, the Executive Services of the Four Pivers Services Authority
named in the foregoing instrument, as	Services of the Four Rivers Sanitation Authority, and that said instrument was signed and sealed in a sealed in the Director and Director of Management Services free act and deed of said Authority.
	,

Notary Public

(SEAL)

SECTION IX PERFORMANCE BOND

IX PERFORMANCE BOND FOUR RIVERS SANITATION AUTHORITY ROCKFORD, ILLINOIS

FINAL CLARIFIERS #7 & #8 REHAB KNOW ALL MEN BY THESE PRESENTS, that WHEREAS, the Four Rivers Sanitation

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Four Rivers Sanitation Authority, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed there under or the specifications accompanying the same and no inadvertent overpayment of progress payments shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications or of any inadvertent overpayment of progress payments. The Four Rivers Sanitation Authority shall be named as beneficiary on this Performance Bond.

remain in full force and effect.

IN WITNESS WHEREOF, the above-bounder their seal thisday of seal of each corporate party being hereto at undersigned representative, pursuant to authorize the components of the comp	, 20, the name and corporate
.	
(Seal)	Principal
	By:
	Name:
	Title:
	Date:
ATTEST:	
Secretary:	2
(Seal)	Surety
	By:
	Name:
	Title:
	Date:
2	
Countersigned:	

SECTION X LABOR & MATERIAL PAYMENT BOND

INVITATION TO BID #22-209 FINAL CLARIFIERS #7 & #8 REHAB

Χ

LABOR & MATERIAL PAYMENT BOND FOUR RIVERS SANITATION AUTHORITY INVITATION TO BID

FINAL CLARIFIERS #7 & #8 REHAB

TO:	Contractor Name
	Contractor City, State
	KNOW ALL MEN BY THESE PRESENTS:
That:	(Contractor)
as Princ	cipal, and
unto the	oration of the State of as Surety; are held and firmly bound e Four Rivers Sanitation Authority, as Obligee, for the use and benefit of claimants as after defined in the amount of
	of Principal and Surety bind themselves, their heirs, executors, administrators, successors signs, jointly and severally, firmly by these presents.
Contrac	WHEREAS, Principal has by written agreement dated20 Entered into a ct with Obligee for in accordance with
	ct documents prepared by the Four Rivers Sanitation Authority which Contract is by ce made a part hereof, and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
 Nothing in this Bond contained shall be taken to make the Obligee liable to any

Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, material man or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such

claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action

No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed. 3.

Surety hereby waives notice of any changes in the Contract, including extensions of time 4.

for the performance thereof.

5. The amount of this Bond shall be reduced by and to the extent of any payment or

payments made in good faith hereunder.
The Principal and Surety shall be liable for any attorneys' fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond. 6.

Signed and Sealed this	day of	, 20)
CONTRACTOR		00	SURETY
Ву:	By;		
Signature	00	Attorney-in-Fact	
Title		Resident Agent	
ATTEST:			
Corporate Secretary (Corporati	ons only)		



Product Submittal

Clarifiers 7&8 Steel Repaint

Presented By: Sincerely,

Patrick Mulcahy
Sherwin-Williams
Sales Representative
SALES- Representative

(608) 213-2198 Patrick.M.Mulcahy@sherwin.com

SHERWIN-WILLIAMS 1506 E RIVERSIDE BLVD LOVES PARK, IL 61111 4743 (815) 964-7080

May 24, 2022



Steel-Immersion Service

Steel/Ferrous Metal

Primer: B67A00235 - Dura-Plate® 235 Multi-Purpose Epoxy (Part A) Haze Gray

Notes: SSPC-SP10, 2 mil (50 micron) profile or SSPC-SP-12/NACE 5, WJ-2.

Apply 7-9 mils dry

Topcoat: B67A00235 - Dura-Plate® 235 Multi-Purpose Epoxy (Part A) Haze Gray

Notes: Apply 7-9 mils dry

Steel-Atmospheric

Steel/Ferrous Metal

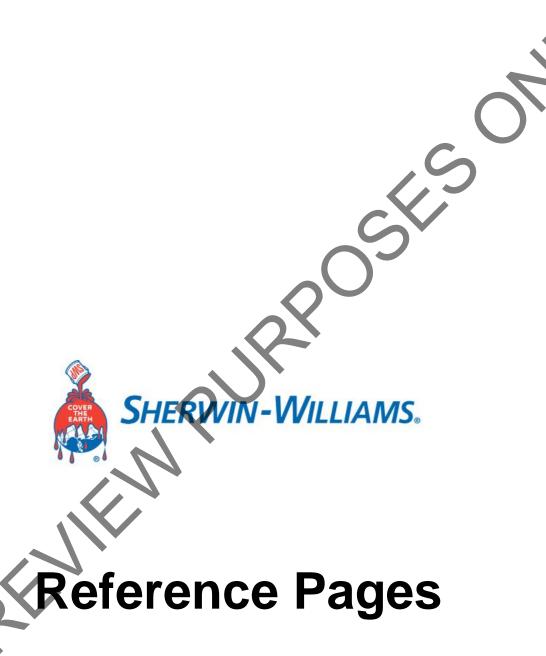
Primer: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White Notes: SSPC-SP2/3 ISO8501-:2007 St 2 or SSPC-SP WJ-3 / NACE WJ-3L. Apply 3-5 mils dry

Intermediate Coat: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White

Notes: 3-5 mils dry

Topcoat: B65W00311 - Hi-Solids Polyurethane Gloss (Part S) Extra White/Tint Base Part S

Notes: 2-4 mils dry



Data Pages OR REVIEW



Protective Marine **Coatings**

DURA-PLATE® 235 MULTI-PURPOSE EPOXY

PART A B67-235 **PART B B67V235 PART B B67V240**

SERIES, COLORS STANDARD HARDENER (<340 g/L VOC, Mixed) LV HARDENER (<250 g/L VOC, Mixed)

Revised: May 13, 2022

PRODUCT INFORMATION

PRODUCT CHARACTERISTICS (CONT'D)

Drying Schedule @ 6.0 mils wet (150 microns): 0°F/-18°C @ 120°F/49°C With B67V240 F/25°C

50% RH 18 hours To touch: 4 hours 2 hours 1 hour To handle: 20 hours 4 hours 72 hours 2 hours

To recoat (self):

4 hours 45 minutes 45 minutes minimum: 24 hours 6 months maximum: 6 months 6 months 6 months Cure to service: 30 days 14 days 7 days If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent. Pot Life: 16 hours 8 hours 4 hours 1 hour

Sweat-in-time: 1 hour 30 minutes 15 minutes 5 minutes

Shelf Life: Part A: 36 months, unopened Part B: 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).

116°F (47°C) PMCC, mixed

Flash Point: Reducer/Clean Up:

EPA, OTC I: Reducer #104 (R7K104)

CARB, OTC II Reducer #111 (R7K111)

RECOMMENDED USES

For use over prepared steel and masonry surfaces.

- Salt water and fresh water immersion resistance
- Ballast tanks, offshore and marine structures
- Bilges and wet void areas
 Above- and below- water hull areas
- Decks and superstructures
- Water and waste water tanks Acceptable for use with cathodic protection systems.
- Dura-Plate 235 Black meets or exceeds the performance criteria of C-200; SSPC Paint 16; and MIL-P-23236B(SH), Type I or IV, Class 2 Suitable for use in USDA inspected facilities Conforms to MPI # 101 (when mixed with Standard Hardener only)

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10/NACE 2

System Tested*:

2 cts. Dura-Plate 235 @ 5.0 mils (125 microns) dft/ct *unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060 CS17 wheel, 1000 cycles, 1 kg load	
Adhesion	ASTM D4541	850 psi
Direct Impact Resistance	ASTM D2794	10 in lb (with Std. hardener) 25 in lb (with LV hardener)
Dry Heat Resistance		250°F (121°C)
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 2000 hours	Rating 10 per ASTM D610 for rusting; Rating 10 per ASTM D714 for blistering
Pencil Hardness	ASTM D3363	Н

IMMERSION

(Ambient temperature)

Salt Water Fresh Water Recommended Recommended Recommended Epoxy coatings may darken or yellow following application and curing

PRODUCT DESCRIPTION

DURA-PLATE 235 Multi-Purpose Epoxy is a modified epoxy phenalkamine, formulated specifically for immersion and atmospheric service in marine and industrial environments. Dura-Plate 235 provides exceptional performance in corrosive environment, and can be applied at temperatures as low as 0° F (- 18° C).

- Self-priming
- Low temperature application, 0°F (-18°C) Surface tolerant damp surfaces
- Provides salt water and fresh water immersion resistance Approved as a primer per MIL-PRF-23236, Type V, Class 7, Grade C (when mixed with Standard Hardener only)
- Outstanding application properties

 LV Hardener (B67V240) is formulated for CARB and OTC II VOC-restricted areas

PRODUCT CHARACTERISTICS

Finish: Semi-Gloss

Color: Wide range of colors available

Volume Solids: 68% ± 2%, mixed Weight Solids: 78% ± 2%, mixed

VOC (EPA Method 24):

with Standard Hardener (EPA, OTC I):
Unreduced: <280 g/L; 2.33 lb/gal
Reduced 10%, R7K104: <340 g/L; 2.83 lb/gal
Reduced 10%, R7K111: <280 g/L; 2.33 lb/gal with LV Hardener (CARB, OTC II):

<250 g/L; 2.08 lb/gal <250 g/L; 2.08 lb/gal Unreduced: Reduced 10%, R7K111:

4:1 by volume Mix Ratio:

Recommended Spreading Rate per coat:

Minimum Maximum **6.0** (150) **12.0** (300) Wet mils (microns) **4.0*** (100) Dry mils (microns) 8.0* (200) **136** (3.3) ~Coverage sq ft/gal (m²/L) **272** (6.6)

Theoretical coverage sq ft/gal 1088 (26.6) (m2/L) @ 1 mil / 25 microns dft

*See Performance Tips section

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

Drying Schedule @ 6.0 mils wet (150 microns):

0°F/-18°C @ 40°F/4.5°C @ 77°F/25°C @ 120°F/49°C With B67V235 50% RH

To touch: 3.5 hours 2 hours 20 minutes 18 hours To handle: 36 hours 12 hours 3.5 hours 40 minutes

To recoat (self):

minimum: 36 hours 12 hours 3.5 hours 40 minutes maximum: 6 months 6 months 6 months Cure to service: 30 days 14 days 7 days 3 days If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

16 hours 8 hours 4 hours Sweat-in-time: 1 hour 30 minutes 15 minutes 5 minutes

www.sherwin-williams.com/protective

continued on back



DURA-PLATE® 235 MULTI-PURPOSE EPOXY

PART A B67-235 **PART B B67V235 PART B B67V240**

SERIES, COLORS STANDARD HARDENER (<340 g/L VOC, Mixed) LV HARDENER (<250 g/L VOC, Mixed)

Revised: May 13, 2022

PRODUCT INFORMATION

RECOMMENDED S	RECOMMENDED SYSTEMS					
	<u>Mils</u>	ickness / ct. (Microns)				
Steel, immersion or atmospheric service: 2 cts. Dura-Plate 235	4.0-8.0	(100-200)				
Steel, immersion service:						
1 ct. Dura-Plate 235 1-2 cts. TarGuard Coal Tar Epoxy	4.0-8.0 8.0-16.0	(100-200) (200-400)				
Steel, atmospheric service: 1 ct. Dura-Plate 235	4.0-8.0	(100, 200)				
1-2 cts. Macropoxy 646	5.0-10.0	(100-200) (125-250)				
Steel, atmospheric service:	0.050	(75.405)				
1 ct. Zinc-Clad II Plus 1-2 cts. Dura-Plate 235	3.0-5.0 4.0-8.0	(75-125) (100-200)				
Steel, atmospheric service:	0.0.5.0	(75.405)				
1 ct. Zinc-Clad IV 1-2 cts. Dura-Plate 235	3.0-5.0 4.0-8.0	(75-125) (100-200)				
Steel, atmospheric service: 1 ct. Corothane I GalvaPac Zinc Primer	3.0-4.0	(75-100)				
1-2 cts. Dura-Plate 235	4.0-8.0	(100-200)				
Steel, atmospheric service:		(400,000)				
1 ct. Dura-Plate 235 1-2 cts. Acrolon 218 HS or Hi-Solids Polyurethane	4.0-8.0 3.0-6.0 3.0-5.0	(100-200) (75-150) (75-125)				
Concrete/Masonry, immersion service: 1 ct. Kem Cati-Coat HS Epoxy Filler/Seal						

as required to fill voids and provide a continuous substrate Dura-Plate 235 (100-200)2 cts. 4.0-8.0

Galvanized, atmospheric service

Dura-Plate 235 2.0-4.0 (50-100)

Steel-Seam FT910 - as required for filling pits, and transitioning sharp edges, weld seams, etc...

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

DISCLAIMER

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

SURFACE PREPARATION

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

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation: Iron & Steel:

SSPC-SP2 or SSPC-SP12/NACE 5, WJ-4 SSPC-SP10, 2 mil (50 micron) profile or SSPC-SP-12/NACE 5, WJ-2 Atmospheric: Immersion:

Concrete & Masonry:

Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R,

Immersion: SPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R, CSP1-3
Galvanized, atmospheric: SSPC-SP1

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

TINTING

Tint Part A with Maxitoners only. Mill White tints at 150%. Ultradeep Base tints at 100%. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

0°F (-18°C) minimum, 120°F (49°C) maximum Temperature:

(air and surface)
*At least 5°F (2.8°C) above dew point

*Acceptable over damp surfaces when under 5°F (2.8°C), however not over ice.

Material should be at least 40°F (4.5°C) for optimal performance.

Relative humidity: Not applicable

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

Part A:

1. gallon (3.76L) allulud gallons (15.1L) in a 5 gallon (18.9L) container 1 quart (0.94L) and 1 gallon (3.78L) 11.3 ± 0.2 lb/gal; 1.35 Kg/L, mixed may vary with color

Part B:

Weight:

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

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

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective, if any is limited to replacement of the defective. 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-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



Protective Marine **Coatings**

DURA-PLATE® 235 MULTI-PURPOSE EPOXY

PART A B67-235 **PART B B67V235 PART B B67V240**

SERIES, COLORS STANDARD HARDENER (<340 g/L VOC, Mixed) LV HARDENER (<250 g/L VOC, Mixed)

Revised: May 13, 2022

APPLICATION BULLETIN

SURFACE PREPARATIONS

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

Iron & Steel, Immersion Service:

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2 or SSPC-SP12/NACE 5. For SSPC-SP10/NACE 2, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). For SSPC-SP12/NACE No. 5, all surfaces to be coated shall be cleaned in accordance with WJ-2. Pre-existing profile should be approximately 2 mils (50 microns). Light rust bloom is allowed. Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel the same day as it is cleaned.

Iron & Steel, Atmospheric Service:

Minimum surface preparation is Hand Tool Clean per SSPC-SP2 or SSPC-SP12/NACE 5. For surfaces prepared by SSPC-SP2, first remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). For surfaces prepared by SSPC-SP12/NACE No. 5, all surfaces shall be cleaned in accordance with WJ-4. Pre-existing profile should be approximately 2 mils (50 microns). Prime any bare steel the same day as it is cleaned.

Galvanized Steel

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

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, 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 hard-concre. Fill bug holder his problem and other with Steel Scars FT740. eners. Fill bug holes, air pockets and other voids with Steel-Seam FT910.

Concrete, Immersion Service:

For surface preparation, refer to SSPC-SP13/NACE 6, Section 4.3.1 or 1.3.2 or ICRI No. 310,2R, CSP 1-3.

Follow the standard methods listed below when applicable: ASTM D4258 Standard Practice for Cleaning Concrete. ISTM D4259 Standard Practice for Abrading Concrete.

ASTM D4260 Standard Practice for Etching Concrete.

ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emis-

sion Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete. ICRI No. 310.2R Concrete Surface Preparation.

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

APPLICATION CONDITIONS

Temperature: 0°F (-18°C) minimum, 120°F (49°C) maximum (air and surface)

*At least 5°F (2,8°C) above dew point

*Acceptable over damp surfaces when under 5°F (2.8°C), however not over ice.

Material should be at least 40°F (4.5°C) for optimal performance.

Relative humidity: Not applicable

APPLICATION EQUIPMENT

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

Reducer/Clean Up

۱	EPA, OTC I:	Reducer #104 (R7K104)
	CARB, OTC II:	Reducer #111 (R7K111)

Airless Spray

Unit	30:1 Pump
Pressure	2400 - 2800 psi
Hose	1/4" - 3/8" ID
Tip	015"019"
Filter	60 mesh
Reduction	As needed, up to 10% by volume

Conventional Spray

Gun	DeVilbiss MBC-510
Fluid Tip	E
Air Nozzle	704
Atomization Pressure	60-65 psi
Fluid Pressure	5-15 psi
Reduction	As needed, up to 10% by volume

Brush

Brush	Natural Bristle
Reduction	Not recommended

Roller

Cover	3/8" woven with solvent resistant cor	е
Reduction	Not recommended	

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



Protective Marine **Coatings**

DURA-PLATE® 235 MULTI-PURPOSE EPOXY

PART A B67-235 **PART B B67V235 PART B B67V240**

SERIES, COLORS STANDARD HARDENER (<340 g/L VOC, Mixed) LV HARDENER (<250 g/L VOC, Mixed)

Revised: May 13, 2022

Application Bulletin

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly using low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine 4 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated prior to application. Re-stir before using.

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

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

Recommended Spreading Rate per coat: Minimum Maximum **12.0** (300) Wet mils (microns) **6.0** (150) Dry mils (microns) 4.0* (100)8.0* (200)~Coverage sq ft/qal (m²/L) **136** (3.3) **272** (6.6) Theoretical coverage sq ft/gal 1088 (26.6) (m²/L) @ 1 mil / 25 microns dft

*See Performance Tips section

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

Drying Schedule @ 6.0 mils wet (150 microns):

@ 40°F/4.5°C 77°F/25°C 120°F/49°C With B67V235 50% RH

3.5 hours 2 hours 20
12 hours 3.5 hours 40 minutes To touch: 18 hours To handle: 36 hours

To recoat (self):

minimum: 36 hours 12 hours 3.5 hours 40 minutes maximum: 6 months 6 months 6 months 6 months 14 days Cure to service: 30 days 7 days 3 days

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

Pot Life: 16 hours 4 hours 1 hour 8 hours 1 hour 30 minutes 15 minutes 5 minutes Sweat-in-time

Drying Schedule @ 6.0 mils wet (150 microns):

@ 77°F/25°C @ 40°F/4.5°C @ 120°F/49°C With B67V240 0°F/-18°C 50% RH To touch: 18 hours 4 hours 2 hours 1 hour To handle: 72 hours 20 hours 4 hours 2 hours To recoat (self):

minimum: 24 hours 4 hours 45 minutes 45 minutes maximum: 6 months 6 months 6 months 6 months Cure to service: 30 days 14 davs 7 davs 3 davs

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

Pot Life: 16 hours 8 hours 1 hour 4 hours 1 hour 30 minutes 15 minutes 5 minutes Sweat-in-time:

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

PERFORMANCE TIPS

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

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

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

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

Insufficient ventilation, incomplete mixing, miscatalyzation, and external heaters may cause premature yellowing.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

For Immersion Service: (if required) Holiday test in accordance with ASTM D5162 for steel, or ASTM D4787 for concrete.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #104 (R7K104) in EPA and OTC I regions, or Reducer #111 (R7K111) in CARB and OTC II

Please contact your Sherwin-Williams Representative for recommendations for immersion service of tinted material.

When coating over aluminum and galvanizing, recommended dft is 2-4 mils (50-100 microns).

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

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #104 (R7K104) in EPA and OTC I regions, or Reducer #111 (R7K111) in CARB and OTC II regions. Clean tools immediately after use with Reducer #104 (R7K104) in EPA and OTC I regions, or Reducer #111 (R7K111) in CARB and OTC II regions. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

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

WARRANTY

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

Protective & Marine Coatings

PRODUCT DATA SHEET



MACROPOXY® 646 FAST CURE EPOXY MASTIC

Revised: May 5, 2022

PRODUCT DESCRIPTION

MACROPOXY 646 Fast Cure Epoxy Mastic is a high solids, high build, fast drying, polyamide epoxy designed to protect steel and concrete in industrial exposures. Ideal for maintenance painting and fabrication shop applications. The high solids content ensures adequate protection of sharp edges, corners, and welds. This product can be applied directly to marginally prepared steel surfaces.

INTENDED USES

- Recommended for marine applications, refineries, offshore platforms, fabrication shops, chemical plants, tank exteriors, power plants, water treatment plants, and mining and minerals industry
- Limited colors are acceptable for immersion use for salt water and fresh water, not acceptable for potable water

PRODUCT DATA

Finish: Semi-Gloss Colors: Mill White, Black and a wide range of colors available through tinting **Volume Solids:** 72% ± 2%, mixed, Mill White VOC (mixed): <250 g/L; 2.08 lb/gal Mix Ratio: 1:1 by volume **Typical Thickness:** Recommended Spreading Rate per coat:

I TOO O III III O II O O O O O O O O O O	CHILD I	uto poi c	
	Mini	imum	Maximum
Wet mils (microns)	7.0	(175)	13.5 (338)
Dry mils (microns)	5.0*	(125)	10.0 (250)
~Coverage sq ft/gal (m²/L)	115	(2.9)	230 (5.8)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1152	(28.2)	
*May be applied at 3.0-10.0 mile (7	75-250 r	microne) d	ft as an

intermediate in a multicoat system.

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

36 months, unopened Store indoors at 40°F (4 Shelf Life:

(4.5°C) to 110°F (43°C)

91°F (33°C), TCC, mixed Flash Point:

Reducer/Clean Up1:YOC Restricted Areas (<250 g/L): use Reducer #111 or Oxsol 100

 2.9 ± 0.2 lb/gal ; 1.55 Kg/L, mixed, may Weight:

Other areas (<340 g/L use Reducer#111, Oxsol 100, Reducer#15, Reducer #58, or MEK up to 10%. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

Average D	rying Times @ 7.0	mils (175 mi	crons) wet:
	35°F (1.7°C)	77°F (25°C)	100°F (38°C)
	50% RH	50% RH	50% RH
Touch:	4-5 hours	2 hours	1.5 hours
		0.1	

Handle: 48 hours 8 hours 4.5 hours Recoat: minimum: 48 hours 8 hours 4.5 hours maximum: 1 year 1 year 1 year Cure to service:

4 days atmospheric: 10 days 7 days immersion: 14 days 7 days 4 days

Average Drying Times as intermediate @ 5.0 mils (125 microns) wet:

1 hour 1 hour 3 hours Handle: 48 hours 4 hours 2 hours

Recoat:

maximum:

minimum: 16 hours

1 year

4 hours 2 hours 1 year 1 year

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent. Paint temperature must be 40°F (4.5°C) minimum.

2 hours Pot Life: 10 hours 4 hours Sweat-in-time: 30 minutes 30 minutes 15 minutes

SURFACE PREPARATION

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

Minimum recommended surface preparation:
Iron & Steel:
Immersion: SSPC-SP2/3/ ISO8501-1:2007 St 2 or SSPC-SP WJ-3 / NACE WJ-3L Immersion: SSPC-SP10 / NACE 2/ ISO8501-1:2007 Sa 2.5, 2-3 mil (50-75 micron) profile or SSPC-SP WJ-2/NACE WJ-2L

Stainless Steel: Atmospheric: SSPC-SP16, 1 mil (25 micron) profile

Aluminum & Galvanizing:

SSPC-SP1. If surface has not be weathered for more than 6 months, follow SSPC-SP1 then SSPC-SP16. For fire proofing projects, consult a Sherwin-Williams representative for surface preparation requirements.

Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R CSP 1-3 Immersion: SSPC-SP13/NACE 6-4.3.1 Concrete & Masonry:

Ductile Iron Pipe:

Atmospheric: NAPF 500-03-03 Power Tool Cleaning Buried & Immersion: NAPF 500-03-04 Abrasive Blast Cleaning Cast Ductile Iron Fittings: NAPF 500-03-05 Abrasive Blast Cleaning



Protective & Marine Coatings

PRODUCT DATA SHEET



MACROPOXY® 646

FAST CURE EPOXY MASTIC

APPLICATION

Reduction...... As needed up to 10% by volume

Conventional Spray*

Dry Film Thickness / ct

Gun	
Fluid Tip	E
Air Nozzle	
Atomization Proceure	60 65 pci (4 1 4 5 bc

Atomization Pressure...... 60-65 psi (4.1-4.5 bar) Fluid Pressure...... 10-20 psi (0.7-1.4 bar)

Brush* Brush

......Nylon/Polyester or Natural Bristle

Roller*

Cover 3/8" woven with solvent resistant core

Plural Component Spray Acceptable

Macropoxy 646 Acrolon 7300

*Reduction1......VOC Restricted Areas (<250 g/L): use Reducer #111 or Oxsol 100

Other areas (<340 g/L): use Reducer #111, Oxsol 100, or Reducer #15 up to 10%. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before usé.

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

RECOMMENDED SYSTEMS

Dry Fili	IVIIIS	(Wicrons)	
Steel 8 2 Cts.	Ductile Iron, Immersion & Atm Macropoxy 646	ospheric 5.0-10.0	(125-250)
Steel, 0 1 Ct. 1 Ct.	Organic Zinc Primer, Atmosphe Zinc Clad IV (85) Macropoxy 646	ric 3.0-5.0 5.0-10.0	(75-125) (125-250)
Steel, I 1 Ct. 1 Ct.	norganic Zinc Primer, Atmosph Zinc Clad II (85) Macropoxy 646	2.0-4.0 5.0-10.0	(50-100) (125-250)
1 Ct. ´	Organic Zinc/Epoxy/Urethane To Zinc Clad IV (85) Macropoxy 646 Acrolon 7300	opcoat 3.0-5.0 3.0-10.0 2.0-4.0	(75-125) (75-250) (50-100)
Steel, I 1 Ct. 1 Ct.	norganic Zinc/Epoxy/Urethane Zinc Clad I (85) Macropoxy 646	Topcoat 2.0-4.0 3.0-10.0	(50-100) (75-250)

Steel Organic Zinc/Epoxy/Polysiloxane Topcoat, Atmospheric 1 Ct. Zinc Clad IV (85) 3.0-5.0 (75-125) 1 Ct. Macropoxy 646 3.0-10.0 (75-250) 1-2 Cts. Sher-Loxane 800 2.0-4.0 (50-100) Concrete/Masonry, Smooth, Immersion & Atmospheric 2 Cts. Macropoxy 646 5.0-10.0 (125-

3.0-10.0 2.0-4.0

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

WARRANTY

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

APPLICATION CONDITIONS

Temperature:

Air: 35°F (1.7°C) minimum, 120°F (49°C) maximum Surface*: 35°F (1.7°C) minimum, 250°F (120°C) maximum Material: 40°F (4.5°C) minimum At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

*Application to surfaces above 120°F (49°C) is not recommended in VOC Restricted Areas (≤250 g/L). When spraying a surface above 120°F (49°C) in other areas (>250 g/L), please consult with your Sherwin-Williams representative. representative.

APPROVALS

Suitable for use in USDA inspected facilities
Acceptable for use in Canadian Food Processing facilities,
categories: D1, D2, D3 (Confirm acceptance of specific part
numbers/rexes with your SW Sales Representative)
Conforms to AWWA D102 OCS #5
Conforms to MPI # 108
This product meets specific design requirements for non-safety
related nuclear plant applications in Level II, III and Balance of
Plant, and DOE nuclear facilities*
Meets Class A requirements for Slip Coefficient, 0.36 @ 6 mils /
150 microns dft (Mill White only)
Approved intermediate for NEPCOAT System B
Approved to Norsok M501 system 7B (limited colors)

Nuclear qualifications are NRC license specific to the facility

ADDITIONAL NOTES

Tint Part A with Maxitoners at 150% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of

Tinting is not recommended for immersion service.

Quick-Kick Epoxy Accelerator is acceptable for use. See data page for details.

Acceptable for concrete floors.

Application to surfaces above 120°F (49°C) is not recommended in VOC Restricted Areas (≤250 g/L). When spraying a surface above 120°F (49°C) in other areas (>250 g/L), please consult with your Sherwin-Williams representative. Spray apply only. Product will produce an orange peel appearance when applied at elevated temperatures.

Topcoating: It is recommended to apply a thinned-down, low wet film thickness mist coat over zinc rich primers to help avoid outgassing. Allow it to tack up and seal the surface. Then apply a full wet film thickness coat as directed.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine one part by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated prior to application. Re-stir before using.

HEALTH AND SAFETY

Refer to the SDS sheet before use.

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(125-250)



Marine **Coatings**

Protective HI-SOLIDS POLYURETHANE

B65-300 PART S PART S B65-350

SEMI-GLOSS SERIES

PART S B65WW305 MR, WHITE TINT BASE (GLOSS)

PART T **B60V30 HARDENER**

Revised: November 5, 2020

PRODUCT INFORMATION

GLOSS SERIES

PRODUCT DESCRIPTION

HI-SOLIDS POLYURETHANE is a two-component, aliphatic, acrylic polyurethane resin coating. It is designed for high performance protection with outstanding exterior gloss and color retention.

- Good/excellent resistance to corrosion and weathering
- Outstanding color and gloss retention Chemical resistant

- Part of a system tested for nuclear irradiation and decontamination, Level II
- Resists film attack by mildew (MR White only)
- Outstanding application properties
- Applications down to 20°F (-7°C)

PRODUCT CHARACTERISTICS

Finish: High Gloss or Semi-Gloss

Color: Wide range of colors possible

Volume Solids: 65% ± 2%, mixed, may vary by color

Weight Solids: 77% ± 2%, mixed, may vary by color

Unreduced: <300g/L; 2.50 lb/gal, mixed VOC (EPA Method 24):

Reduced 6%: <340 g/L; 2.84 lb/gal, mixed may vary by color/reducer*

*see Application Equipment section on Page 3 for more details

Mix Ratio: 4:1 by volume

Recommended Spread	ding Rate pe	r coat:
	Minimum	Maximum
Wet mils (microns)	4.5 (112)	8.0 (200)
Dry mils (microns)	3.0 (75)	5.0 (125)
~Coverage sq ft/gal (m²/L)	208 (5.1)	347 (8.5)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1040 (25.5)	
NOTE: Brush or roll application		

achieve maximum film thickness and uniformity of appearance. Drying Schedule @ 4.5 mils (112.5 microns) wet:

	a	@	@	@
	20°F7-7°C	40°F/4.5°C	77°F/25°C	120°F/49°C
			50% RH	
To touch:	16 hours	4 hours	2 hours	1 hour
To handle:	14 days	16 hours	8 hours	5 hours
To recoat:				
minimum:	32 hours	24 hours	18 hours	10 hours
maximum:	unlimited	30 days	30 days	30 days
To cure:	40 days	14 days	10 days	7 days
If maximum reco	at time is exc	eeded, abrad	e surface bef	ore recoating.

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

2 hours Pot Life: 3 days 8 hours 4 hours Sweat-in-None required

Time:

Shelf Life: Part S - 36 months, unopened Part T - 24 months, unopened Store indoors at 40°F (4.5°C) to

100°F (38°C). 80°F (27°C), PMCC, mixed

Reducer/Clean Up:

Flash Point:

Below 80°F (27°C Above 80°F (27°C Polane Reducer K69 or R7K111 Reducer #58 or R6K32

RECOMMENDED USES

- For use over prepared substrates in industrial environments
- Heavy duty interior and exterior structural coating
- A chemical and abrasion resistant equipment and machinery finish
- A gloss and color retentive heavy duty maintenance coating for use in "high visibility" areas
- Exterior surfaces of steel tanks
- Refineries
- Clean rooms
- Chemical processing equipment
- Conveyors Power Plants
 - Handrails
- Marine & Offshore Applications
- Resists film attack by mildew (MR White only)
- Suitable for use in USDA inspected facilities
- Acceptable for use in Canadian Food Processing facilities categories: D1, D3 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)
- Conforms to AWWA D102 OCS #5 & #6.
- Acceptable for use in high performance architectural applications Over FIRETEX hydrocarbon systems

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP6/NACE 3

1 ct. Recoatable Epoxy Primer @ 4.0 mils (100 microns) dft 1 ct. Hi-Solids Polyurethane Gloss @ 3.0 mils (75 microns) dft *unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	87.1 mg loss
Adhesion	ASTM D4541	1050 psi
Corrosion Weathering ¹	ASTM D5894, 21 cycles, 7056 hours	Rating 10 per ASTM D714 for blistering; Rating 9 per ASTM D610 for rusting
Direct Impact Resistance	ASTM D2794	32 in. lbs.
Dry Heat Resistance	ASTM D2485	200°F (93°C)
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Moisture Condensa- tion Resistance	ASTM D4585, 100°F (38°C), 1000 hours	No rusting, blistering, or delamination
Pencil Hardness	ASTM D3363	F
Salt Fog Resistance ¹	ASTM B117, 9000 hours	Rating 10 per ASTM D714 for blistering; Rating 9 per ASTM D610 for rusting
Surface Burning	ASTM E84	Flame Spread Index 0; Smoke Development Index 0 (at 3.5 mils or 88 microns)
Thermal Shock	ASTM D2246, 15 cycles	Excellent

Meets the requirements of SSPC Paint No. 36, Level 3 for white and light colors. Dark colors may require a clear coat.

¹ Primer: Zinc Clad II Plus; Intermediate - Recoatable Epoxy Primer



Marine **Coatings**

Protective HI-SOLIDS POLYURETHANE

B65-300 PART S PART S B65-350

SEMI-GLOSS SERIES B65WW305 MR, WHITE TINT BASE (GLOSS)

PART T **B60V30 HARDENER**

Revised: November 5, 2020

PRODUCT INFORMATION

PART S

GLOSS SERIES

RECO	IVI IVI	ENL	IED	31	5	EIV	15

	RECOMMENDED 3	191EIVIS	
Steel:	Energy Drimer	Dry Film Thi Mils	ickness / ct. (Microns)
1 ct.	Epoxy Primer Recoatable Epoxy Primer Hi-Solids Polyurethane	4.0-6.0 3.0-5.0	(100-150) (75-125)
Steel: 1 ct. 1-2 cts.	Epoxy Primer Dura-Plate 235 Hi-Solids Polyurethane	4.0-8.0 3.0-5.0	(100-200) (75-125)
Steel: 1 ct. 1 ct. 1-2 cts.		2.0-4.0 5.0-10.0 3.0-5.0	(50-100) (125-250) (75-125)
Steel: 1 ct. 1-2 cts.	Epoxy Mastic Primer Macropoxy 646 Hi-Solids Polyurethane	5.0-10.0 3.0-5.0	(125-250) (75-125)
Steel: 1 ct. 1-2 cts.	Universal Primer Kem Bond HS Metal Hi-Solids Polyurethane	2.0-5.0 3.0-5.0	(50-125) (75-125)
Steel: 1 ct. 1 ct. 1 ct.	Zinc Rich Primer Zinc Clad DOT Steel Spec Epoxy Intermediate Hi-Solids Polyurethane	2.0-4.0 3.0-6.0 3.0-5.0	(50-100) (75-150) (75-125)
Alumin 1 ct. 1-2 cts.	u m: DTM Wash Primer Hi-Solids Polyurethane	0.7-1.3 3.0-5.0	(18-32) (75-125)
Concre 1 ct.	ete: Kem Cati-Coat Epoxy HS	10.0-15.0	(250-375)
1-2 cts.	Filler/Sealer Hi-Solids Polyurethane	3.0-5.0	(75-125)
1 ct.	ized Metal: Recoatable Epoxy Primer Hi-Solids Polyurethane	4.0-6.0 3.0-5.0	(100-150) (75-125)

Finish Coat for FIRETEX Hydrocarbon Systems:

Hi-Solids Polyurethane*

*Consult FIRETEX PFP Specialist for recommended dft range

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

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SURFACE PREPARATION

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

Refer to product Application Bulletin for detailed surface preparation information.

- Minimum recommended surface preparation:

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

 * Aluminum: SSPC-SP1

 * Galvanizing: SSPC-SP1
- Galvanizing
- SPC-SP13/NACE 6, or ICRI Concrete & Masonry No. 310.2R, CSP 1-3
- Primer Required

Surface Preparation Standards

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

TINTING

Tint with Maxitoner Colorants only into Part S. Extra White tints at 200% tint strength. Ultradeep tints at 150% tint strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature:

20°F (-7°C) minimum 120°F (49°C) maximum (air, surface, and material) Do not apply over surface ice At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: Part S: 1 gallon (3.78L) and 4 gallon (15.1L) kits quarts (0.94L) and gallons (3.78L) Part T:

10.7 ± 0.2 lb/gal ; 1.28 Kg/L mixed, may vary with color Weight:

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

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WARRANTY

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



Marine **Coatings**

Protective HI-SOLIDS POLYURETHANE

B65-300 PART S PART S B65-350

GLOSS SERIES SEMI-GLOSS SERIES

PART S B65WW305 MR, WHITE TINT BASE (GLOSS) PART T **B60V30**

HARDENER

Revised: November 5, 2020

APPLICATION BULLETIN

SURFACE PREPARATIONS

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

Iron & Steel

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 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. Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning 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. 310.2R, 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.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.

ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.

SSPC-SP 13/Nace 6 Surface Preparation of Concrete.

ICRI No. 310.2R Concrete Surface Preparation.

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

APPLICATION CONDITIONS

20°F (-7°C) minimum 120°F (49°C) maximum (air, surface, and material) Do not apply over surface ice At least 5°F (2.8°C) above dew point Temperature:

85% maximum Relative humidity:

APPLICATION EQUIPMENT

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

Reducer/Clean Up

Below	80°F	(27°C)	Polane Reducer K69 or R7K111
Above	80°F	(27°C)	Reducer #58 or R6K32

Airless Spray

Pressure	2500 - 2800 psi
Hose	3/8" ID
Tip	013"017"
Filter	none

Reduction.....As needed up to 10% by volume with R7K111, or up to 6% by volume with

Polane Reducer K69, Reducer #58, or R6K32 - reducing more than these levels may result in VOC exceeding

340 q/L

Conventional Spray

Gun	Binks 95
Fluid Nozzle	63 B
Atomization Pressure	50 - 70 psi
Fluid Pressure	20 - 25 psi

Reduction.....As needed up to 15% by volume*

Brush Bruch

Diusii	. Natural bristic
Reduction	.As needed up to 15% by volume*

Natural brietla

Roller

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

*As needed up to 15% by volume with R7K111, or up to 6% by volume with Polane Reducer K69, Reducer #58, or R6K32 - reducing more than these levels may result in VOC exceeding 340 g/L

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



Protective & Marine Coatings

Protective HI-SOLIDS POLYURETHANE

PART S B65-300 PART S B65-350 GLOSS SERIES
SEMI-GLOSS SERIES

PART S B65WW305 MR

MR, WHITE TINT BASE (GLOSS)

B60V30 HARDENER

Revised: November 5, 2020

APPLICATION BULLETIN

PART T

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine 4 parts by volume of Part S with 1 part by volume of Part T. Thoroughly agitate the mixture with power agitation.

If reducer solvent is used, add only after both components have been thoroughly mixed.

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

Recommended Spreading Rate per coat:

	Minimum	Maximum	
Wet mils (microns)	4.5 (112)	8.0 (200)	
Dry mils (microns)	3.0 (75)	5.0 (125)	
~Coverage sq ft/gal (m²/L)	208 (5.1)	347 (8.5)	
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1040 (25.5)		

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

Drying Schedule @ 4.5 mils (112.5 microns) wet:

	@	@ 40°F/4.5°C	@	@
	20°F/̄-7°C	40°F/4.5°C	77°F/25°C	120°F/49°C
			50% RH	
To touch:	16 hours	4 hours	2 hours	1 hour
To handle:	14 days	16 hours	8 hours	5 hours
To recoat:		1///		
minimum:	32 hours	24 hours	18 hours	10 hours
maximum:	unlimited	30 days	30 days	30 days
To cure:	40 days	14 days	10 days	7 days
If maximum recoat time is exceeded, abrade surface before recoating.				
Drying time is temperature, humidity, and film thickness dependent.				
Pot Life:	3 days	8 hours	4 hours	2 hours
Sweat-in- Time:		None re	equired	

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

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #58. Clean tools immediately after use with Reducer #58. Follow manufacturer's safety recommendations when using any solvent.

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PERFORMANCE TIPS

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

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

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

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

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #58.

Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.

Quick-Thane Urethane Accelerator is acceptable for use. See data page 5.97 for details.

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

R7K69 reducer is acceptable at temperature both above and below 80°F (28°C).

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

SAFETY PRECAUTIONS

Refer to the SDS sheet before use

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