### GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF GENERAL SERVICES







Addendum No. 4

To

## INVITATION FOR BIDS ("IFB") Solicitation Number: DCAM-23-CS-IFB-0001

### **Construction Services for FLEET Maintenance Epoxy Flooring Upgrades**

### Issued: January 20, 2023

This Addendum No.4 is issued on January 20, 2023. Except as modified hereby, the IFB remains unmodified.

Item #1: The questions and answers spreadsheet is hereby attached as Exhibit A.

**Item #2:** Attachment J.2 (Form of Offer Letter & Bid Form) of the IFB is revised and hereby attached as **Exhibit B**.

Item #3: Attachment J.1 (Drawings and Specification) of the IFB is revised and hereby attached as **Exhibit C**.

Item #4: Attachment J.1.1 (Drawings and Specification) to the IFB is established and hereby attached as Exhibit D.

By: James H. Marshall

Date: 1/20/23

James H. Marshall DGS Contracting Officer

- End of Addendum No. 4-

# Exhibit A

Questions and answers spreadsheet (See following page)

## GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF GENERAL SERVICES







## **Exhibit A Questions & Answers Spreadsheet**

No.	Question	DGS Response
1	Please provide the correct quantities for each one of the phases. We have access to phase 1 & 3 portions, but phase 2's quantity appeared to be blocked out.	Mechanical preparation and application of a 3-coat, 30 mils high build coatings system on approximately 28,000 square feet at the above referenced facility.
2	Will epoxy installer have full control of the space for each phase, being able to complete entire floor pertaining to that phase or will customer need to be able to walk into that space creating (2) sections of install per phase?	Yes, the installer will of control of the space/phase that they are working in. DCFD will NOT enter the space/phase while work is being conducted by the installer. The work will be done in 3 phases to accommodate moving of equipment and to maintain operations; The large area will be done in 2 sections and the small bay next to the welding shop will be done by itself.
3	Install can happen during normal hours and will have up to 10 days per phase?	This facility runs 24/7 and therefore work can occur outside of normal work hours if required. Areas not being worked on by the installer will continue to be utilized by DCFD.
4	Floor to be repaired to a smooth surface prior to installing epoxy system, per job walk, concrete is in rough shape and will need spalls and cracks filled properly. What steps is customer requiring addressing the damaged slab?	Conditions of the existing floor are available for all contractors to view in advance of the proposal submission. Contractor is required to deliver complete and operational epoxy floor system in accordance with manufactures requirements. That includes cleaning/grinding/shot blasting/patching/pasting areas in advance of epoxy system application.
5	During the site walk it was apparent that there is areas that are saturated in oil. What steps is each customer required to take to remediate oil saturated slab areas?	The referenced area shall be clean enough to prior to apply the epoxy coating, per the manufacturer's requirements.
6	Will there be any line striping required?	YES
7	Please confirm that cove base is not needed.	As discussed on the site walk, a 1 inch, hand troweled CANT BASE will be required where floor meet outer walls.

8	Are mockups required for slip resistance/ texture?	Yes $-10 \ge 10$ ft mockup will be required in advance of installation of any phases to confirm product application and slip resistance.
9	Epoxy installer to install an isolation strip at transition between walls and floor with caulk to match color of the floor. Please confirm.	As discussed on the site walk, a 1 inch, hand troweled CANT BASE will be required where floor meet outer walls.
10	It is recommended to install a Urethane Cement in Fire Departments/ High Traffic areas. Urethane Cement systems are much more durable, can handle the oil grease issues better than epoxy systems, is a thicker system and will fill in the spalls/ repairs on the slab. Urethane Cement systems are rated to resist moisture issues that are typical for older slabs. Urethane cement systems are known to last decades especially in these heavy duty/ high traffic applications. After site walk it has become clear that Urethane Cement system is the best solution for this project. Is the owner open to allowing manufacturers to recommend a system that will be better suited for this project?	Please bid the systems specified in the procurement documentation. A urethane cement system will NOT be entertained.
11	Could you provide the spec on the Sherwin Williams epoxy product and confirm what the requirement is to prep the floor?	The Sherwin Williams specification is attached as (Attachment J.1.1) to the addendum No. 4.
12	There is only one page of drawings provided and it also has the phasing plan on it. Are we installing the cove base on this job? If we are, I need drawings without the phasing areas covering up the rooms so I can take the cove base off accurately.	Drawings attached to the addendum No. 4.
13	Are there accessible floor drains in each phase?	YES
14	The Epoxy should not be mixed or applied to floors below 55° FIs the temperature inside conducive for this application?	The facility has overhead, water source heaters that should keep the ambient temperature of the facility above the manufacture's requirements.

## Exhibit B

(Form of Offer Letter & Bid Form) (See following page) Form of Offer Letter and Bid Form DCAM-23-CS-IFB-0001

[Contractor's Letterhead]

[Insert Date]

James H. Marshall Contracting Officer Department of General Services 1250 U Street, NW 2<sup>nd</sup> Floor Washington, DC 20009

# Reference:Invitation for Bid ("IFB") DCAM-23-CS-IFB-0001Construction Services for FLEET Maintenance Epoxy Flooring Upgrades

Dear Mr. Marshall:

On behalf of [INSERT NAME OF BIDDER] (the "Bidder"), I am pleased to submit this bid in response to the Department of General Services' (the "Department" or "DGS") IFB for the Construction Services for Fleet Maintenance Epoxy Flooring Upgrades. The Bidder has reviewed the IFB and the attachments thereto and any addenda thereto (collectively, the "Bid Documents" or "Contract Documents") and has conducted such due diligence and analysis as the Bidder, in its sole judgment, has deemed necessary in order to submit its bid in response to the IFB. The Bidder's bid and the Lump Sum Price are based on the Bid Documents as issued and assume no material alteration of the terms of the Bid Documents (collectively, the bid and the Lump Sum Price are referred to as the "Bidder's Bid").

The Department is requesting a lump price to perform the required services utilizing the ECONOSURF method described in Attachment J.1. In addition, the Department is requesting an alternate price to perform the required services utilizing the SHERWIN WILLIAMS method described in Attachment J.1.1. For purposes of evaluation, the Department will utilize the sum of the total lump sum amount for CLIN 001 and the total lump sum for the Alternate.

CLIN	DESCRIPTION	LUMP SUM PRICE
<ul> <li>Furnish all construction administration, supervision, labor, materials, and equipment necessary to complete the Construction Services for Fleet Maintenance Epoxy Flooring Upgrades in accordance with the Drawings and Specifications (Attachment J.1) ECONOSURF sample.</li> </ul>		\$
	TOTAL LUMP SUM – CLIN 001	\$
AlternateFurnish all construction administration, supervision, labor, materials, and equipment necessary to complete the Construction Services for Fleet Maintenance Epoxy Flooring Upgrades in accordance with the Drawings and Specifications (Attachment 		\$
	TOTAL LUMP SUM – Alternate	
	TOTAL LUMP SUM CLIN 001 + Alternate	\$

#### The Bidder's Bid is as follows:

#### **Total Lump Sum Price:**

The Bidder shall submit a completed Price Schedule Bid Form providing the price for Division and CLIN 001, for Fleet Maintenance Epoxy Flooring Upgrades in accordance with the Drawings and Specifications (Attachment J.1) ECONOSURF sample. The sum of all the prices for each Division Component must equal the Lump Sum Price for CLIN 001.

The Bidder shall submit a completed Price Schedule Bid Form providing the price for Division for the Alternate, Fleet Maintenance Epoxy Flooring Upgrades in accordance with the Drawings and Specifications (Attachment J.1.1) SHERWIN WILLIAMS sample. The sum of all the prices for each Division Component must equal the Lump Sum Price for the Alternate.

The Bidder's Bid is based on and subject to the following conditions:

- 1. The Bidder agrees to hold its bid open for a period of at least one hundred twenty (120) days after the IFB closing date.
- 2. Assuming the Bidder is selected by the Department and subject only to the changes requested in paragraph 5, the Bidder agrees to enter into a contract with the Department on the terms and conditions described in the Bid Documents within ten (10) days of the notice of the award.
- 3. Both the Bidder and the undersigned represent and warrant that the undersigned has the full legal authority to submit this bid form and bind the Bidder to the terms of the Bidder's bid. The Bidder further represents and warrants that no further action or approval must be obtained by the Bidder in order to authorize the terms of the Bidder's bid.
- 4. The Bidder and its principal team members hereby represent and warrant that they have not: (i) colluded with any other group or person that is submitting a bid in response to the IFB in order to fix or set prices; (ii) acted in such a manner so as to discourage any other group or person from submitting a bid in response to the IFB; or (iii) otherwise engaged in conduct that would violate applicable anti-trust law.
- 5. The Bidder hereby certifies that neither it nor any of its team members have entered into any agreement (written or oral) that would prohibit any contractor, subcontractor or subconsultant that is certified by the District of Columbia Office of Department of Small and Local Business Enterprises as a Local, Small, Resident Owned or Disadvantaged Business Enterprise (collectively, "LSDBE Certified Companies") from participating in the work if another company is awarded the contract.

This Form of Offer Letter and Bid Form are being submitted on behalf of [INSERT FULL LEGAL NAME, TYPE OF ORGANIZATION, AND STATE OF FORMATION FOR THE BIDDER].

Sincerely,

Company: Name: Title: Date: Signature:

DIVISION NO. DESCRIPTION DIVISION COST					
Division 01	General Requirements				
Division 02	Existing Conditions				
Division 03	Concrete				
Division 04	Masonry				
Division 05	Metals				
Division 06	Wood, Plastics, Composites				
Division 07	Thermal and Moisture Protection				
Division 08	Openings				
Division 09	Finishes				
Division 10	Specialties				
Division 11	Equipment				
Division 12	Furnishings				
Division 13	Special Construction				
Division 14	Conveying Equipment				
Division 21	Fire Suppression				
Division 22	Plumbing				
Division 23	Heating, Ventilating, and Air Conditioning (HVAC)				
Division 25	Integrated Automation				
Division 26	Electrical				
Division 27	Communications				
Division 28	Electronic Safety and Security				
Division 31	Earthwork				
Division 32	Exterior Improvements				
Division 33	Utilities				
	Lumn Sum Price:	\$			

DCAM-23-CS-IFB-0001 Price Schedule Bid Form				
DIVISION NO DESCRIPTION DIVISION COST				
Division 01	General Requirements	Division cost		
Division 02	Existing Conditions			
Division 03	Concrete			
Division 04	Masonry			
Division 05	Metals			
Division 06	Wood, Plastics, Composites			
Division 07	Thermal and Moisture Protection			
Division 08	Openings			
Division 09	Finishes			
Division 10	Specialties			
Division 11	Equipment			
Division 12	Furnishings			
Division 13	Special Construction			
Division 14	Conveying Equipment			
Division 21	Fire Suppression			
Division 22	Plumbing			
Division 23	Heating, Ventilating, and Air Conditioning (HVAC)			
Division 25	Integrated Automation			
Division 26	Electrical			
Division 27	Communications			
Division 28	Electronic Safety and Security			
Division 31	Earthwork			
Division 32	Exterior Improvements			
Division 33	Utilities			
	Lump Sum Price:	\$		

# Exhibit C

Attachment J.1 (Drawings and Specifications) (See following page)

# FEMS FLEET - EPOXY FLOOR COATING PROJECT - 3 PHASE PLAN



























# 30-Mil Epoxy System

# DATA SHEET

#### **DESCRIPTION:**

The 30-Mil Epoxy System is a three (3) coat, high build epoxy coating system consisting of two (2) coats of ES-3150 Epoxy applied at a total of 26 mils and a finish coat of a clear or pigmented chemical resistant urethane (ES-5322) top coat, applied at 4-dry mils.

The system is available in clear and colors achievable by mixing the clear ES-3150 Epoxy or clear ES-5322 CRU with one of 16 "specialty" urethane/ epoxy Colorants in the field.



#### **RECOMMENDED USES:**

The 30-Mil Epoxy Coating System is used on concrete service area floors in auto, truck and aircraft maintenance facilities that are subjected to light to moderate traffic and typical chemical spillages.

#### FEATURES:

- Squeegee Applied, Self-Leveling
- Easy Mixing Ratio
- 16 Standard Colors
- Can Be Installed Smooth or With Various Degrees of Non-Slip
- VOC Compliant
- Good Chemical Resistance-Resists Brake Fluid, Battery Acid and Skydrol 500B.
- Good Abrasion Resistance

#### PACKAGING:

The ES-3150 Epoxy Coating is available in 15-gal and 165-gal units for easy job-site mixing and application.

The ES-5322 Chemical Resistant Urethane is available in 15-gal semi-bulk units.

#### COVERAGE:

The ES-3150 Epoxy is applied at the rate of approximately 115 sq. ft. per gallon per coat, which is about 14 mils. The ES-5322 Chemical Resistant Urethane is applied at the rate of 300 sq. ft. per gal. As with all coatings, coverage is dependent on the smoothness and porosity of the surface and is determined mathematically.

#### SURFACE PREPARATION:

The <u>substrate</u> must be clean, dry and sound with new concrete cured for at least 30 days at 70°F. Remove dust, laitance, grease, curing compounds, waxes, foreign particles, disintegrated or soft base materials, and any previously applied potentially incompatible coatings. Create a surface profile on concrete by steel shot blasting. Cracks and joints should be repaired before the installation of the ES-3150 Epoxy Coating.

If the concrete surface is not prepared properly, product adhesion will fail and warranties will be voided.

#### FOR OPTIMUM RESULTS:

- For Interior Use Only Where Freeze/Thaw Occurs.
- New Concrete Must Cure For at Least 30 Days @ 70°F
- · DO NOT Reduce The ES-3150 Epoxy Coating with Thinner
- DO NOT Use When Relative Humidity Exceeds 75% Indoors.
- DO NOT Apply to Structurally Unsound Surfaces.
- DO NOT Apply heavier than recommended wet film thickness.
- · Allow Each Coat to Dry Tack-Free Before Recoating.
- Apply Subsequent Coats Within 24 Hours of Previous Coat.

#### Review ECONO SURF's Material Safety Data Sheets (MSDS) for this product prior to mixing and applying. In addition, thoroughly review the Application Guide and product labels.

#### MIXING:

Avoid mixing and application of this product if the floor temperature is below  $55^{\circ}F$  or above  $85^{\circ}F$ . Also, avoid application if the relative humidity is higher than 75%. The temperature of the floor, materials and air in the area of the installation all play a role in how the product will apply and cure.

General Properties:	Data			
Shelf Life	Ероху:	Epoxy: 2 Years Urethane; 1-Year		
Colors	Clear &	Variety with Field Colora	ants	
Induction	None			
Coverage	ES-315	0 is 114 sq. ft. per gal @	14 wet mils	
Mixing Ratio: (A to B)	ES-532	<u>2 is 300 sq. ft. per gai @</u> 0 is 1·2 by volume	5 wet mils	
Application Temp & Humidity	55°E to	85°F @ less than 75% R	н	
	15 Col	and 14E Cal Dulk Unita		
Раскаушу	Flat or	And Too-Gal Bulk Units	nh quality 3/8" nan	
Application Methods	roller	Notenica Squeegee a rite	in quality 5/6 hap	
Cure Rate @ 75 ° F				
Recoat	5-6 hrs			
Foot Traffic	10 hrs.			
Heavy Traffic	24+ hrs.			
Chemical Resistance	72+ hrs.			
Test		Method	Typical Values	
Bond Strength (psi)		ACI COM #503 (pp. 1139-1141)	400+ w/ concrete	
% Solids by Volume		ASTM D-1644	100.0	
Flash Point		Pensky-Martens CC	>200°F	
UV Light Resistance		Q-U-V Accelerated Weather Tester	Good	
Hardness-Shore D		ASTM D-2240	84+	
VOC		EPA Method 24	0.27 lbs/gal	
Gloss (60°)		BYK-Gardner Tri-Gloss	90+	
Impact Resistance		ASTM D-2794	>160 in-lbs.	
Indentation		MIL-D-3134F	None	
Abrasion Resistance (mg) (CS-17 wheel 1000 GM load 1 000 cycles)		ASTM D-1044	65	
Flammability		ASTM D-635	Self-Extinguishing	
Dry Heat Resistance			140 °F Constant 200 °F Intermittent	
Water Absorption (%)		ASTM C-413	0.17%	

If Colorants are to be used with the ES-3150 Epoxy Coating, or the ES-5322 Urethane, the appropriate quantity of Colorant is first added to the Part-B Resin and mixed in uniformly before the Part-A Hardener is added. Consult an Econo Surf representative for information regarding the quantity of each colorant required.

The ES-3150 Epoxy is mixed at a ratio of 1 part by volume Part-A Hardener to 2-parts by volume of Part-B Resin. A typical batch consists of one gallon of Part-A Hardener to two gallons of Part-B Resin. DO NOT change the ratio of A to B.

The ES-5322 Chemical Resistant Urethane is mixed at a ratio of 1 part by volume Part-A Hardener to 2 parts by volume of the Part-B resin to 1 quart of Colorant.

Blend thoroughly for a minimum of 2 minutes with a "Jiffy" or "Spiral" mixing blade attached to a low-speed (400-600 RPM) electric drill. Take care not to induce air into the material when mixing. This will cause "bubbles" in the coating when applied.

#### APPLICATION:

- 1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720.
- Notch squeegee apply 14-mils (114 sq. ft./gallon) 100% solids clear epoxy (ES-3150 Epoxy) and back roll to level using a 3/8" nap, 18" wide, mohair roller.
- Notch squeegee apply 12-mils (133 sq. ft./gallon) of a clear or pigmented 100% solids epoxy (ES-3150) and back roll to level using a 3/8" nap, 18" wide, mohair roller.
- 4. Power sand/screen the entire area (if necessary) to remove surface defects such as grit, air bubbles, etc. and tack rag clean to remove fine dust using a floor sander with #80 grit sand paper.
- 5. Sweep and/or vacuum to remove residual epoxy dust and other contaminates.
- 6. Broadcast #24 or #36 aluminum oxide safe walk grit onto the cured epoxy basecoat at a rate designated by the customer's representative (typically one-lb. per 1,000 sq. ft.)
- Roller apply one (1) finish coat of a clear or pigmented, V.O.C. compliant, chemical resistant aliphatic urethane (ES- 5322 CRU) using a 1/2" nap, 18" wide, mohair roller at approximately 5 mils (300 sq. ft./gallon). Avoid excess agitation of the liquids with the roller. This will lessen chances of bubbling of the final film.

#### POT LIFE:

At 75°F and 50% R.H., the ES-3150 Epoxy in both clear and pigmented systems have a useful working time or pot life of 15-20 minutes. The ES-5322 Chemical Resistant Urethane has a working time of approx. 3-hrs.

Using any product beyond this time will yield variable results and therefore any mixed product beyond the pot life should be discarded.

#### CLEAN UP:

Application equipment should be cleaned using soap and water or solvent where necessary. Roller covers should be discarded after use.

#### DISPOSAL:

Empty containers may contain product residue, including flammable or combustible vapors. Do not cut, puncture or weld near these containers. Label warnings must be observed until containers have been commercially cleaned or reconditioned. Any containers to be thrown out must be disposed in accordance with federal, state and local regulations.

#### CUSTOMER NOTE:

For information on application situations not covered above, contact the corporate office at 1-302-322-4920

# Exhibit D

Attachment J.1.1 (Drawings and Specifications) (See following page)

# FEMS FLEET - EPOXY FLOOR COATING PROJECT - 3 PHASE PLAN

























COVER EARTH	Protective &	HIG			<sup>™</sup> 3746 EPOXY
SHERWIN WILLIAMS.	Marine Coatings	Part A GP37 Part A GP87 Part B GP37 Part B GP37 Part B GP37	746 wm 746 Wm 746B01 746B02 F	ANTIMICRO I Fast Cure	Series deial Agent Hardener Hardener
Revised: Januar	y 6, 2022 PRODUCT II	IFORMATIO	N		
Pr	RODUCT DESCRIPTION	PRODUCT	CHARACTER	ISTICS (C	ONT'D)
RESUFLOR 3746 I recoatable epoxy a primed substrates, and mortar system chemical, impact a	High Performance Epoxy is a two-component, and binder resin. It may be used directly over or as a gloss seal coat over decorative slurry s. Resuflor 3746 is extremely hard wearing, nd abrasion resistant.	Recomme Wet mils (microns): ~Coverage sq ft/gal (	ended Spreading M : 10 (m²/L): 5	<b>Rate per co</b> inimum .0 (250) i3 (1.3)	<b>bat:</b> Maximum 30.0 (750) 159 (3.9)
	Advantages	Drying Schedu	<u>ule @ 10.0 mils</u>	(250 micro	ons) wet:
<ul> <li>Impact and abrast</li> <li>Durable, easy to</li> <li>Chemical resistation</li> <li>Suitable for use if</li> <li>Acceptable for use categories: D2 (categories: D2 (categories: backwork)</li> <li>Available with an</li> </ul>	sion resistant clean int in USDA inspected facilities se in Canadian Food Processing facilities, confirm acceptance of specific part numbers/ Sherwin-Williams representative) n antimicrobial agent (GP8746 series)	G Standard Hardener: To touch: To recoat: minimum maximum	<ul> <li>25°F (13°C)</li> <li>16-24 hours</li> <li>24 hours</li> <li>48 hours</li> <li>48 hours</li> </ul>	<b>72°F(22°C)</b> 50% RH 6-12 hours 8 hours 24 hours 24 hours	@ 95°F(35°C) 4-8 hours 6 hours 24 hours
<ul> <li>Tint bases can b see Tinting section</li> </ul>	e tinted using Măxitoner @ 50% tint strength - on on next page for details	Heavy traffic:	48 nours 96 hours	72 hours	60 hours
	TYPICAL USES	Full cure:	7 days	7 days	7 days
RESUFLOR 3746 areas where maint appealing and cher Resuflor 3746 is su workshops, and lig	<b>High Performance Epoxy</b> should be used in enance of a high performance, aesthetically mical resistant epoxy system is required. uited for use in clean rooms, laboratories, ht assembly areas.	Fast Cure Hardener To touch: To recoat: minimum	•	3-4 hours 6	
		maximum		12 10.12 hours	
<ul> <li>Slab on grade i</li> <li>Substrate must inhibiting conta</li> <li>During installati air temperature temperature mu (for lower temp Williams repres</li> <li>Maximum dry s</li> <li>Strictly adhere</li> <li>Apply clear at o</li> </ul>	requires vapor/moisture barrier to be structurally sound, dry and free of bond minants ion and initial cure cycle substrate and ambient must be at a minimum of 50°F (10°C). Substrate ust be at least 5°F (3°C) above the dew point erature installation contact your Sherwin- sentative). urface temperature not to exceed 160°F (71°C) to published coverage rates nly 10-15 mils (250-375 microns) maximum per	Heavy traffic: Full cure: If maximum recoat time Drying time is temper Pot Life (Standard) gallon mass Pot Life (Fast Cure) gallon mass	e is exceeded, abra rature, humidity, an 60 minutes	24 hours 7 days ade surface be d film thicknes 40 minutes 25 minutes	efore recoating. ss dependent. 20 minutes
coat		Shelf Life: Part	A: 18 R (Standard): 12	months, unop	pened
Su	IRFACE PREPARATION	Part Part Store	B (Fast Cure): 12 e indoors at 40°F (	months, unop 4.5°C) to 100°	pened F (38°C)
Proper inspection a resinous material is	and preparation of the substrate to receive s critical. Read and follow the "Instructions for Proparation" (Form C. 1) for complete details	Perform	MANCE CHAR	RACTERIS	TICS
		Test Name	Test Method	Results	
Finish:	Gloss	Abrasion Resistance	ASTM D4060, CS17 wheel, 100	76 mg loss 0	6
Color:	Clear, Standard Colors	Adhesion	ACI 503R	300 psi, co	oncrete failure
	Wide range of colors possible Tintable: W01 (white tint base) and T04 (ultra deep tint base)	Flammability		Self-exting concrete	juishing over
	See page 2 for additional tint details.	Flexural Strength	ASTM D 790	~12,400 ps	si
Volume Solids:	99%, mixed	Impact Resistance	ASTM D 2240 MII -D-3134.1	// Direct: 160	) in-lb
Weight Solids:	99%, mixed		ASTMF84/	Reverse: 2	20 in-lb ead Index 20;
Mix Ratio:	2:1	Surface Burning	NFPA 255	Smoke De Index 90	velopment
	(24) < 100 all $(0.92)$ halad mixed	Tensile Strength	ASTM D 638	3527.4 psi	

VOC (EPA Method 24): <100 g/L; 0.83 lbs/gal, mixed

\*Resuflor Aqua 3477 at 1.5 mils (40 microns) DFT topcoated with Resuflor 3746 at 17.5 mils (438 microns) DFT



Revised: January 6, 2022

# **RESUFLOR™ 3746 HIGH PERFORMANCE EPOXY**

GP3746 GP8746 GP3746B01 GP3746B02 PART A PART A PART B PART B

SERIES WITH ANTIMICROBIAL AGENT HARDENER **FAST CURE HARDENER** 

# **PRODUCT INFORMATION**

STORAGE / APPLICATION	CHEMICAL RESISTANCE
MATERIAL DELIVERY AND STORAGE:	For comprehensive chemical resistance information, consult the Chemical Resistant Guide and contact your Sherwin-Williams
Store materials in accordance instructions, with seals and labels intact and legible. Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. 18 months	CLEANUP
shelf life is expected for products stored between $40^{\circ}F$ (4.5°C) - 100°F (38°C).	Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.
APPLICATION INSTRUCTIONS:	
1. Premix GP3746 (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.	SAFETY Refer to the SDS sheet before use.
2. Add 2 parts GP3746 (resin) to 1 part GP3746B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.	Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.
	MAINTENANCE
3. Apply GP3746 using a squeegee or trowel and back roll with a 3/8" nap roller at a spread rate of 50-160 square feet per gallon (1.3-4.0 meters squared per liter) to yield 10-30 mils (250-750 microns) WFT making sure of uniform coverage. Take care not to puddle materials and insure even coverage.	Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact your Sherwin- Williams representative.
4. Allow to cure 24 hours minimum before opening to traffic and 72 hours before water exposure.	
Note: Epoxy materials will appear to be cured and "dry to touch" prior to full chemical cross linking. Allow epoxy to cure a minimum of 3 days prior to exposure to water or other chemicals for best performance.	
Τιντινς	
Tint bases can be tinted using Maxitoners @ 50% tint strength. No more than 6 oz. of Maxitoner colorant for the Ultra Deep Base (T04) and no more than 2 oz. of Maxitoner colorant for the White Base (W01).	
Ensure that the colorant is thoroughly incorporated prior to use.	DISCLAIMER
Do not tint package colors.	The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin- Williams representative to obtain the most recent Product Data Information and Application Bulletin.
	WARRANTY
	The Sherwin-Williams Company warrants our products to be free of manufactur- ing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defec- tive product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHER WARRANTY FINDLA MED

CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



# **RESUPRIME™ 3579** STANDARD EPOXY PRIMER / BINDER

Part A Part B GP3579 GP3579B01

Series Hardener

Revised: December 17, 2021

# **PRODUCT INFORMATION**

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## **PRODUCT DESCRIPTION**

**RESUPRIME 3579** is a high solids, clear or pigmented epoxy primer and binder resin. It is available in clear, red, white and gray, has good blush resistance, and is low in viscosity to promote penetration of the concrete substrate and excellent wetting of mortar aggregate.

#### **ADVANTAGES**

- Good blush resistance at room temperature
- Low modulus of elasticity, stress relieving
- Acceptable for use in USDA inspected facilities

## TYPICAL USES

**RESUPRIME 3579** is an epoxy primer for coatings, slurries, mortar overlays, and patches. It can be also used as a binder resin. For slurries, mortar and patching systems. Suitable for use in the Mining & Minerals industry.

#### LIMITATIONS

- Slab on grade requires vapor/moisture barrier
- Surface must be clean and dry
- · Cool damp conditions may cause surface blushing
- Substrate must be structurally sound and free of bond inhibiting contaminants
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 50°F (10°C).
   Substrate temperature must be at least 5°F (3°C) above the dew point (for lower temperature installation contact your Sherwin-Williams representative.
- When required, adequate ventilation shall be provided and proper clothing and respirators worn
- Strictly adhere to published coverage rates

#### SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow the "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

Product Characteristics				
Color:	Clear, Red, Gray, White			
Mix Ratio:	2:1			
Volume Solids:	96% ± 2%, mixed			
Weight Solids:	96% ± 2%, mixed			
VOC (EPA Method 24):	<50 g/L mixed: 0.41 lbs/gal			
Viscosity, mixed:	2.100 cps			

Recommended Spreading Rate per coat:				
	Min	imum	Max	imum
let mils (microns):	6	(150)	30	(750)
Coverage sq ft/gal (m²/L):	var	ies accordi	ng to us	sage
Druing Schodulo @ 6 mile (150 microne) wat				

#### Drying Schedule @ 6 mils (150 microns) wet: @ 73°F (23°C)

To touch:	6-8 hours		
To recoat:	10-20 hours		
If maximum rec	oat time is exceeded, abrade surface before recoating.		
Drying time is temperature, humidity, and film thickness depe			
Pot Life:	gallon mass 25-30 minutess @ 73°F (23°C)		
Shelf Life:	Part A: 36 months, unopened Part B: 36 months, unopened Store indoors at 50°F (10°C) to 90°F (32°C)		

Flash Point: >230°F (>110°C), ASTM D 93, mixed

#### **PERFORMANCE CHARACTERISTICS**

Test Name	Test Method	Results
Adhesion	ACI 503R	300 psi concrete failure
Compressive Strength	ASTM D 695	9,000 psi
Flammability		Self-extinguishing over concrete
Flexural Strength	ASTM D 790	6,000 psi
Hardness, Shore D	ASTM D 2240	75/65
Tensile Strength	ASTM D 638	3,000 psi

SHERWIN VILLIAMS. Revised: December	Protective & Marine Coatings	; ст In	STANDAF Part A Part B FORMAT	RESUPRII RD EPOXY PRIME GP3579 GP3579B01	ME <sup>™</sup> 3579 ER / BINDER Series Hardener
	Application			Tinting	
		Do not tint.			
<ol> <li>Add 2 parts 3579A (resin) to 1 part 3579B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow the mix ratio.</li> <li>Resuprime 3579 may be applied via spray, roller or brush. Apply evenly, with no puddles. Coverage will vary depending upon porosity of the substrate and surface texture.</li> <li>Resuprime 3579 application varies upon usage.</li> <li>NOTE: Epoxy materials may tend to blush at the surface especially in humid environments. After the surface is primed and before installation of each subsequent coat, surface must be examined for blush (a whitish greasy film and/or low gloss). The blush must be completely removed prior to recoating using warm detergent water or through solvent wipe.</li> <li>Epoxy materials will appear to be cured and dry to touch prior to full chemical cross linking. Allow epoxy to cure for 2-3 days prior to exposure to water or other chemicals for best performance.</li> </ol>		CLEANUP Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precau- tions when handling or storing solvents.			
		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.			
		MAINTENANCE			
		Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact your Sherwin- Williams representative.			
OF	RDERING INFORMATION			Disclaimer	
Packaging: Part A: Part B:	1 gallon (3.8L) and 5 gallon (18.9L) containers 1 gallon (3.8L) and 5 gallon (18.9L) containers		The information a based upon tests Such information a pertain to the pro Williams represer Application Bullet	and recommendations set forth in to conducted by or on behalf of The S and recommendations set forth here duct offered at the time of publicat tative to obtain the most recent Pr in.	his Product Data Sheet are Sherwin-Williams Company. in are subject to change and ion. Consult your Sherwin- oduct Data Information and

5 gallon (18.9L) containers

9.4 ± 0.2 lb/gal; 1.13 Kg/L mixed, may vary by color

Weight:

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.

SHERWIN WILLIAMS.	Protective & Marine Coatings	HS POLYUR Part A Part A Part A Part B	<b>RES</b> ETHANE GP4638A01 GP4638W01 GP4638T04 GP4638B01	UTILE <sup>TM</sup> 4638 FLOOR ENAMEL CLEAR WHITE TINT BASE ULTRADEEP TINT BASE STANDARD HARDENER				
Revised: March 24, 2022 PRODUCT INFORMATION								
PRODUCT DESCRIPTION		Pro	PRODUCT CHARACTERISTICS					
RESUTILE 4638 H durable finish used topcoat over other Resutile 4638 is for imposed by many s aggressive chemic	S Polyurethane Enamel is a tough, high-glos as a stand-alone coating system or an option Sherwin-Williams high-build flooring system mulated to meet the tight VOC restrictions states. It resists UV degradation, certain als and possesses superior gloss retention.	SS, Color: nal s. Mix Ratio: Volume Solids: Weight Solids:	Clear an Tintable: GP4638 See pag 2:1 71% ± 2 90% ± 2	d a wide range of custom colors GP4638W01 (white tint base) an T04 (ultradeep tint base) ONLY e 2 for additional tint details. %, mixed %, mixed				
	Advantages	VOC (EPA Method 2	24): <250 g/L 1.500 cp	.; 2.1 lb/gal, mixed s				
<ul> <li>Outstanding resistance to a wide range of chemical, weather and mechanical conditions</li> <li>Excellent wear</li> <li>High gloss retention</li> <li>UV (Ultraviolet) light stable</li> </ul>		Wet mils (microns)	mended Spread Mir :: 3 (m²/L): 355	Ing Rate per coat:           Imum         Maximum           (75)         4.5         (112)           (9.0)         533         (13.5)				
<ul> <li>Abrasion and i</li> <li>Suitable for us</li> <li>Auto service c</li> <li>Skydrol resista</li> </ul>	mpact resistant e in USDA inspected facilities enters, airport hangars nt	Drying Scl To touch: To recoat: Light foot traffic:	<u>nedule @ 4 mi</u>	<b>s (100 microns) wet:</b> <b>@ 73°F (23°C)</b> 2 hours 6-24 hours 12 hours				
Typical Uses           RESUTILE 4638 HS Polyurethane Enamel is designed as a finish coat on flooring systems used in warehouses, commerical facilities, aircraft hangars, automobile dealerships and pharmaceutical facilities.		Heavy traffic: sh aft <i>If maximum recoat i</i> <i>Drying time is tem</i> <b>Pot Life</b> :	Heavy traffic:       72 hours         Full Cure:       7 days         If maximum recoat time is exceeded, abrade surface before recoating.         Drying time is temperature, humidity, and film thickness dependent.         Pot Life:       gallon mass         4 hours       @ 73°F (23°C)					
<ul> <li>Urethanes are se</li> <li>Slab on grade ret</li> </ul>	Insitive to environmental conditions quires vapor/moisture barrier	Shelf Life:	Shelf Life:         Part A: 36 months, unopened Part B: 24 months, unopened Store indoors at 50°F (10°C) to 90°F (32°C)					
<ul> <li>Substrate must be structurally sound and free of bond inhibiting contaminants</li> <li>During installation and initial cure cycle, substrate and ambient air temperature must be at a minimum of 60°F (16°C) and 90°F (32°C)</li> </ul>		Flash Point: Reducer*:	Flash Point:102°F (39°C), ASTM D 93, mixedReducer*:VOC Restricted Areas (<250 g/L): Reduction not recommended					
<ul> <li>maximum. Substitute dew point (for Williams represented with the nequired, a clothing and response).</li> </ul>	maximum. Substrate temperature must be at least 5°F (3°C) above the dew point (for lower temperature installation contact your Sherwin- Williams representative). When required, adequate ventilation shall be provided and proper		Clean Up:         Reducer R6K30 or R7K225           *Other areas (<340 g/L): Reducer R6K30 or R7K225 up to 5% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.					
<ul> <li>Do not premix Pa</li> <li>Humidity must pa</li> </ul>	In B hardener	PERFO	RMANCE CH	ARACTERISTICS				
<ul> <li>Do not install in o</li> </ul>	pen areas during rain	Test Name	Test Method	Results				
<ul> <li>Strictly adhere t</li> <li>This coating the staining. Vehicu</li> </ul>	o published coverage rates ugh resistant, is not a guarantee against tire lar tires from cars and trucks to tractors and be	Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles	63 mg loss				
trailers are varie certain condition	ed and have the potential to leave a stain under ns. Place rubber mats or carpet pieces under the e issue.	r he Friction	ACI503R ASTM F 1679	350 psi concrete failure 0.5 min dry 0.6 dry with Shark Grip Additiv				
-		Flammability		Self-extinguishing over concrete				
Proper inspection of	IRFACE PREPARATION	Gloss @ 73°F/23°C 50%RH	60º Gloss Meter	85 millage units				
resinous material is Concrete Surface F	s critical. Read and follow the "Instructions for Preparation" (Form G-1) for complete details	Impact Resistance	ASTM D2794	Direct inch-pound greater than 100, passes Reverse, inch-pound greater than 100, passes				
		Pencil Hardness	ASTM D 3363	2H				
		Resistance to Elevated Temperature	MIL-D-3134J	No slip or flow at required temperature of 158°F (70°C)				

COVER EARTH	Protective &	RESUTILE™ 4638 HS POLYURETHANE FLOOR ENAMEL				
SHERWIN VILLIAMS.	Marine Coatings	Part A Part A Part A Part B	GP4638A01 GP4638W01 GP4638T04 GP4638B01	Clear White Tint Base Ultradeep Tint Base Standard Hardener		
Revised: March 24	4, 2022 <b>PRODUCT</b>	INFORMA	TION			
	Application		TINTING			
APPLICATION INS	STRUCTIONS:	Tint Part A w	Tint Part A with Maxitoner Colorant at 100% tint strength (white			
Recommende Resuprime 35	ed Primers (for concrete): i04 and Resuprime 3579	mixing on a of color.	mixing on a mechanical shaker is required for complete mixing of color.			
Recommende	d Primers (for tile):		CLEANUP			
1. Premix 4638A (ref for one minute and air into the material	esin) using a low speed drill and Jiffy blade. N until uniform, exercising caution not to introdu	Liza Clean spills R7K225. Cle or R7K225. when using	Clean spills and spatters immediately with Reducer R6K30 or R7K225. Clean tools immediately after use with Reducer R6K30 or R7K225. Follow manufacturer's safety recommendations when using any solvent.			
2. Add 2 parts 4638	A (resin) to 1 part 4638B (hardener) by volum	ie.	SAFFTY			
uniform. To insure	proper system cure and performance, strictl	y Refer to the	Refer to the SDS sheet before use.			
3. Apply 4638 using square feet per gal uniform coverage.	ommendations. g a 1/4" nap roller at a spread rate of 355-5 lon, evenly, with no puddles making sure of <b>Fake care not to puddle materials and insu</b>	<ul> <li>Published te without notic for additiona</li> <li>ire</li> </ul>	Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.			
even coverage.	·		MAINTENANCE			
4. Allow to cure 12 traffic.	hours minimum before opening to light foot	Occasional ir prolong syste Williams rep	Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact your Sherwin-Williams representative.			
Reduction: VOC Restricted Are	eas (<250 g/L): Reduction not recommende	For all guide out to your h representati	For all guidelines on concrete surface preparation, please reach out to your high performance flooring tech service rep or sales representative. Refer to Form G-1.			
Other areas (<340 by volume. Choose Confirm compliance	g/L): Reducer R6K30 or R7K225 up to 5% a reducer that is compliant in your area. with state and local air quality rules before us	se.				
Excessive reductio and possibly cause	n of material can affect film build, appearan e color float.	се				
Or	DERING INFORMATION					
Packaging:	1 collop (2.91) and			IMED		
Part B:	5 gallon (18.9L) containers 1 gallon (3.8L) containers 5 gallons (18.9L) containers	The information based upon tes Such informatio	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			
Weight:	$10.0 \pm 0.2$ lb/gal; 1.20 Kg/L	pertain to the p Williams repres Application Bull	pertain to the product offered at the time of publication. Consult your S Williams representative to obtain the most recent Product Data Informat Application Bulletin.			
	mineu, may vary by color		WARRA	NTY		
For comprehensive Chemical Resistan representative.	<b>TEMICAL RESISTANCE</b> e chemical resistance information, consult th t Guide and contact your Sherwin-Williams	The Sherwin-W ing defects in ac Liability for prod tive product or t determined by OF ANY KIND I STATUTORY, E CHANTABILITY	The Sherwin-Williams Company warrants our products to be free of manufactur- ing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defec- tive product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER- CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.			