

Addendum No. 1

Owner: City of Unalaska

Project: **FY17 ANNUAL FACILITY PAINTING AND 3-YEAR PAINTING CONTRACT**
DPW File No. 29-240

Date: June 1, 2016

Please acknowledge receipt of this Addendum No. 1 in the appropriate blanks on the bid form.

The following corrections, changes, additions, deletions, revisions, and/or clarifications are hereby made a part of the contract documents for the **FY17 ANNUAL FACILITY PAINTING AND 3-YEAR PAINTING CONTRACT, DPW File No. 29-240**. In case of conflicts between this Addendum and previously issued documents, this Addendum shall take precedence.

This addendum includes some revised documents and the Pre-Bid Conference Meeting Minutes.

Item 1: PROJECT MANUAL, TABLE OF CONTENTS:

Part 4, Technical Specifications, *delete* "Section 01025 – Measurement and Payment".

Change "Section 07910 – Joint Sealants" to "Section 07920 – Joint Sealants".

Item 2: PROJECT MANUAL, Part 1 BIDDING REQUIREMENTS, Section 00300 BID FORM, Page 00300-3, BID TABULATION AND SUMMARY:

Add the following: "Bidder acknowledges that each Bid Item contained in the Bid Proposal includes all work described and shown in the Exhibits and described in the General Description of Work Scope, performed in accordance with the requirements of the Technical Specifications and these Contract Documents."

Item 3: PROJECT MANUAL, Part 2 CONTRACT FORMS, Section 00500 STANDARD FORM OF AGREEMENT BETWEEN THE OWNER AND CONTRACTOR;

Article 2 CONTRACT TIME, Item 2.1, *Change* "The CONTRACTOR is allowed **until October 15, 2016** for final completion of this project." *to* "The CONTRACTOR is allowed **until June 30, 2017** for final completion of this project."

Item 4: PROJECT MANUAL, Part 4 TECHNICAL SPECIFICATIONS, Specification Section 09900 – PAINTING;

Delete Specification Section 09900 in its entirety and replace it with the revised specification attached to this addendum.

Item 5: PROJECT MANUAL, APPENDIX A, Exhibit 3 Dutch Harbor (DUT) Airport Terminal, Drawing AIR-1 N-S ELEVATIONS:

General Note 1; *Delete* “1. SANDBLAST AND/OR “from the first part of the sentence. Structural steel/ferrous metals shall be Power Tool Cleaned to SSPC-SP3 standards as specified.

Item 6: PROJECT MANUAL, APPENDIX A:

All Exhibits: *Add* “X. Electric Conduit and boxes adjacent to newly painted surfaces.”

Exhibit 2 - Unalaska Library, General Description of Work Scope:

Add “9. Screen Wall fence.”

Exhibit 4 – Unalaska DPW Facility Fuel Tanks, Generator Structure, General Description of Work Scope:

Item 5, *Add* “(inside and out)” after “Doors”.

Add “6. Catwalk and Rails.”

Exhibit 8 – Unalaska Powerhouse, General Description of Work Scope:

Add “8. Fence rails and posts adjacent to Exterior Canopy.”

Add “9. Exterior Steel Stairs (to first level structure below fuel oil tank); stairs, grating, stringers, nosings, landing, rails and miscellaneous steel complete.”

Exhibit 9 – Ounalashka Park Concession Building, Maintenance Building and Dugouts, General Description of Work Scope:

Add “4. Maintenance Building Roll-Up Door.”

End of Addendum No. 1

Attachments

Pre-Bid Meeting Minutes (2 pages)

Specification 09900 PAINTING with product attachments.

FY17 ANNUAL FACILITY PAINTING AND 3-YEAR PAINTING CONTRACT

Addendum No. 1

Pre-Bid Conference Meeting Minutes

Project: FY17 ANNUAL FACILITY PAINTING AND 3-YEAR PAINTING CONTRACT, DPW File No. 29-240

Subject: Meeting Minutes, Pre-Bid Conference

Date: May 31, 2016

Meeting Attendees:

Bill Dunkelberger, City of Unalaska Building Maintenance Supervisor

Terry Jones, All Wall Contracting, Inc.

Bob Cushen, Industrial Resources, Inc.

John Tassin, Terrashield Coatings, Ltd.

Mike Anderson, DAMA Industrial, LLC

Aaron McLaughlin, DAMA Industrial, LLC

Tom Regan, Regan Engineering, P.C.

Dale Ratcliff, Rodda Paint Company

The content of these meeting minutes is informational only. Nothing contained herein is or is represented to be contractually binding. Any and all modifications to the contract documents will be made by formal addenda. Modifications will be made as a result of the issues raised during this meeting and as appropriate.

Tom Regan provided a project overview. The bid package is to paint some of the City's facilities plus extend the work to include a 3-year contract to expand the scope or paint other facilities as requested. The bid items correspond with the Exhibits contained in the Appendices of the Bid Documents. The intent is for each of the bid items to encompass the work described in the "General Description of Work Scope" included with each Exhibit. The Work should be accomplished in conformance with the requirements of the Technical Specifications.

The Exhibits were reviewed on an individual basis as follows:

Exhibit 1 – Unalaska Department of Public Safety (DPS): The intent is to paint all exterior wood, including the interiors of the vestibules that are exposed to the exterior environment. There is mold and mildew showing on the NW corner of the building that should be killed before paint is applied. A Mildewcide should be used; apply, dry then paint. The specification for wood is missing from the bid documents. It is recommended that 100% acrylic "Sharkskin" be used. The conduits on the west side of the building should be painted. That will make the work easier. The trim will include the rust colored surrounds around the windows. The color at DPS may change based on selection by the users.

Exhibit 2 – Unalaska Library: There is a back stairwell to the second floor. The wood stairs are in decent condition and do not need painted. The steel handrails will need painted. This is already included in the General Description of Work Scope. The work will also include the screen wall fence, which is not already described in the Work Scope.

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Exhibit 3 – Dutch Harbor (DUT) Airport Terminal: The exterior mandors are fiberglass so they do not need painted. The exterior ceilings and soffits contain a lot of steel components including fire suppression sprinkler pipes and beam brackets. All of the steel, including bolts, need prepped and painted. The drawings say to sandblast and/or wire brush. Sandblasting creates issues related to terminal use, containment, media disposal, air traffic, etc. so it is not a reasonable option. Everything should be power tool cleaned to an SSPC-SP3 finish. Workers will need to check in with the local ADOT at the airport and obtain approval for working on the secure side of the terminal adjacent to the tarmac.

Exhibit 4 – Unalaska DPW Facility Fuel Tanks, Generator Structure: On the generator building, paint the sides, top, doors (inside and out), and louver. Do not paint the undercarriage, bottom of the container or exhaust piping. Paint the small catwalk that spans between the building and the generator enclosure, including the rails on the catwalk.

Exhibit 5 – Unalaska Solid Waste Baling Facility – Fuel Oil Tank, Waste Oil Tank and Structure: The waste oil tank needs an SSPC-SP3 surface prep. The entire tank is to be prepped and painted. The concrete is a containment basin and space is limited. The inside of the building structure does not need to be painted.

Exhibit 6 – Tutiakoff Park: All park buildings are painted with the same color scheme. Otherwise, no comments.

Exhibit 7 – Sitka Spruce Park Restroom Facility: No comments.

Exhibit 8 – Unalaska Powerhouse: The fence posts and rails near the lean-to need to be painted. The fence fabric should be removed prior to painting. Around the fuel oil tank, paint all of the yellow painted steel rails, including around the platform the tank sits on. Paint the stairs, rails and landing accessing the white door on the north side below the fuel tank.

Exhibit 9 – Ounalashka Park Concession Building, Maintenance Building and Dugouts: The exterior siding on the concession building and the maintenance building has recently been replaced with cedar painted with an oil based primer. The siding in the recesses at either end of the building has not been replaced. No paint is required for the stained or clear finished ceilings or the doors to the restrooms in the alcoves on the concession building. Paint the overhead door on the maintenance building. Do not paint the light fixtures on the maintenance building. On the dugouts, only paint the exteriors.

General: DPW can probably offer up some storage in one of their Connexes. The Agreement requires completion by October 15, 2016. That should be changed to June 30, 2017. It may be possible to extend that date for a small amount of work (25% or less) but that is not a given and the contract speaks for itself.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.2 SUMMARY

- A. This Section includes surface preparation and field painting of the following:
 - 1. Exposed exterior items and surfaces.
- B. Paint exposed surfaces except where the material is not to be painted or is to remain natural. Paint the item or surface the same as existing or similar adjacent materials or surfaces whether or not schedules indicate colors.
- C. Prior to painting after surface preparation, caulk and seal around windows, doors, penetrations and other areas required to make the building envelope watertight.

1.3 DEFINITIONS

- A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
 - 1. *Flat* refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
 - 2. *Eggshell* refers to low-sheen finish with a gloss range between 5 and 20 when measured at a 60-degree meter.
 - 3. *Satin* refers to low-sheen finish with a gloss range between 15 and 35 when measured at a 60-degree meter.
 - 4. *Semigloss* refers to medium-sheen finish with a gloss range between 30 and 65 when measured at a 60-degree meter.
 - 5. *Full gloss* refers to high-sheen finish with a gloss range more than 65 when measured at a 60-degree meter.

1.4 SUBMITTALS

- A. Product Data: Submit for each paint system specified. Include fillers and primers if required.
 - 1. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - 2. Manufacturer's Information: Provide manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
 - 3. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).

- B. Samples for Verification: Provide for each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.
 - 1. Provide a list of materials and applications for each coat of each sample. Label each sample location and application.
 - 2. Submit Samples on the following substrates for the Engineer's review of color and texture only:
 - a. Painted Wood: Provide two 12-inch- (300-mm-) square samples of each color and material on hardboard.
 - b. Stained or Natural Wood: Provide two 4-by-8-inch (100-by-200-mm) samples of natural or stained-wood finish on actual wood surfaces.
 - c. Ferrous Metal: Provide two 4-inch- (100-mm-) square samples of flat metal and two 8-inch- (200-mm-) long samples of solid metal for each color and finish.

1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to that indicated for this Project with a record of successful in service performance.
- B. Source Limitations: Obtain fillers, primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
 - 1. Product name or title of material.
 - 2. Product description (generic classification or binder type).
 - 3. Manufacturer's stock number and date of manufacture.
 - 4. Contents by volume, for pigment and vehicle constituents.
 - 5. Thinning instructions.
 - 6. Application instructions.
 - 7. Color name and number.
 - 8. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.
 - 1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.7 PROJECT CONDITIONS

- A. Apply paints as recommended by manufacturer. Items below represent minimum required project conditions.
- B. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are above 50-deg F (10 and 32 deg C).
- C. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are above 45-deg F (7.2 and 35 deg C).
- D. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5-deg F (3 deg C) above the dew point; or to damp or wet surfaces.
 - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature and moisture limits specified by manufacturer during application and drying periods.

1.8 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied in the quantities described below. Package paint materials in unopened, factory-sealed containers for storage and identify with labels describing contents. Deliver extra materials to the Owner.
 - 1. Quantity: Furnish the Owner with extra paint materials in the quantities indicated below:
 - a. Exterior Alkyd Enamel: 2 gal. of each color applied for siding.
 - b. Exterior Alkyd Enamel: 1 gal. of each color applied for trim.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide the products in the paint schedules. Specifications are based on materials and colors by the following manufacturers:
 - 1. Exterior paints and transparent finish materials:
 - a. Sherwin Williams
 - b. Benjamin Moore
 - c. Cabot
 - d. Rodda
 - e. Carboline
 - f. Corraseal
 - b. Or equal

2.02 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide fillers, primers, undercoats, and finish-coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

- B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed substitutions.
- C. Colors: Match colors shown on the drawings or to match existing colors if not called out. The Owner shall approve all colors during the submittal process.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with the Applicator present, under which painting will be performed for compliance with paint application requirements.
1. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
 2. Do not begin to apply paint until all voids, joints, penetrations, holes and other items have been caulked and sealed to provide a watertight barrier.
 3. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
1. Notify the Engineer about anticipated problems using the materials specified over substrates primed by others.

3.2 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, signs, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.
1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.

1. Remove all surface contamination by power washing with appropriate cleaners, rinse thoroughly, and allow to dry.
 2. Remove mold and mildew with a mildew eliminator applied in accordance with the manufacturer's directions.
 3. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
 4. All failed existing caulking is removed and new caulking applied to make the structure watertight.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified. Surface shall be free of any voids with holes and cracks patched flush with the surface. All penetrations and shall be caulked.
1. Provide barrier coats over incompatible coatings or remove and reprime.
 2. Painted Wood:
 - a. Fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
 - b. Stains from water, smoke, ink, pencil, grease, etc. shall be sealed with an appropriate primer/sealer.
 - c. Seal screw fasteners to prevent rust bleed-through.
 - d. Spot prime bare wood.
 - e. Caulk perimeter joints, penetrations and other areas to make the building envelope watertight.
 3. Varnished Wood: Remove existing varnish by stripping, scraping and sanding as required.
 - a. Remove dust and clean as recommended by the paint manufacturer.
 4. Fiberglass Reinforced Plastic (FRP): Clean surfaces of dirt, oil, and other foreign substances.
 5. Ferrous Metals: Prepare in accordance with the requirements of the Society for Protective Coatings (SSPC) SP3 Power Tool Cleaning standard. Remove all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter by power wire brushing, power sanding, power grinding, power tool chipping, and power tool descaling.
 - a. Apply rust converter surface coating prior to prime coat.
 5. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods. Scrap or sand existing paint to assure a solid bond.
- D. Materials Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.

2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 3. Use only thinners approved by paint manufacturer and only within recommended limits.
- E. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.3 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
1. Paint colors, surface treatments, and finishes are indicated in the schedules.
 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 3. Provide finish coats that are compatible with primers or existing paints used.
 4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.
 5. Paint surfaces behind movable facilities the same as similar exposed surfaces.
 6. Sand lightly between each succeeding enamel or varnish coat.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
1. Apply sealer to rusty screws and fasteners to prevent burn-through. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.
 2. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 3. Omit primer on metal surfaces that have been previously painted or do not have exposed bare steel.
 4. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
 5. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.
- C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted.
 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.
- E. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to exposed louvers and duct hoods.
- F. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.
- G. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- H. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.
1. Provide satin finish for final coats.
- I. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.
- J. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.4 FIELD QUALITY CONTROL

- A. The Owner reserves the right to invoke the following test procedure at any time and as often as the Owner deems necessary during the period when paint is being applied:
1. The Owner will engage the services of an independent testing agency to sample the paint material being used. Samples of material delivered to the Project may be taken, identified, sealed, and certified in the presence of the Contractor.
 2. The testing agency will perform appropriate tests for the following characteristics as required by the Owner:

- a. Quantitative material analysis.
 - b. Abrasion resistance.
 - c. Apparent reflectivity.
 - d. Flexibility.
 - e. Washability.
 - f. Absorption.
 - g. Accelerated weathering.
 - h. Dry opacity.
 - i. Accelerated yellowness.
 - j. Recoating.
 - k. Skinning.
 - l. Color retention.
 - m. Alkali and mildew resistance.
3. The Owner may direct the Contractor to stop painting if test results show material being used does not comply with specified requirements. The Contractor shall remove noncomplying paint from the site, pay for testing, and repaint surfaces previously coated with the rejected paint. If necessary, the Contractor may be required to remove rejected paint from previously painted surfaces if, on repainting with specified paint, the 2 coatings are incompatible.

3.5 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
 1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

3.6 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Engineer.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
 1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

3.7 EXTERIOR PAINT SCHEDULE

- A. General: Provide the following paint systems for the various substrates indicated. Verify and confirm that the proposed systems are suitable for the intended substrates.
- B. Exterior Wood:
 1. 100% Acrylic solid hide stain: two coats

- a. First and Second Coats: Exterior solid hide stain.
- C. Wood and Steel Doors:
 - 1. Meet requirements for exterior wood, ferrous metal or zinc coated metal surfaces.
- D. Ferrous Metal:
 - 1. Rust Converter Surface Coating: After cleaning, apply water based rust converter as bonding agent and to create barrier of non-rusting magnetite, Application rate 8-10 mils wet film thickness. Manufacturer: Corroseal or equal.
 - 2. Primer: One coat 2-part epoxy. Apply at 1-2 mils dry film thickness. Manufacturer: Carboline, Rustbond FC or equal.
 - 3. First and Second Coats: 2-part polyurethane. Apply at 2-4 mils DFT. Manufacturer: Cloverdale/Rodda, ArmourShield or equal.
- F. Zinc-Coated Metal:
 - 1. High-Gloss Alkyd Enamel: Two finish coats over primer.
 - a. Primer: Galvanized metal primer.
 - b. First and Second Coats: Gloss alkyd enamel.

END OF SECTION 09900

Corro Seal® Product Data

**PRODUCT IDENTIFICATION**

Corro Seal® Rust Converting Primer (CS100)

PRODUCTS

SKU# 82320 - 1 quart jug
 SKU# 82331 - 1 gallon jug
 SKU# 82335 - 5 gallon pail
 SKU# 82320 - 52 gallon drum

**PRODUCT DESCRIPTION**

Corro Seal® is a water based rust converter combined with a non pigmented high quality latex metal primer. The converter segments turn rust into a barrier layer of black non rusting magnetite. The primer acts as a bonding agent for oil-based intermediate and finish coatings of epoxy, enamel, acrylic, polyurethane and moisture-cured urethane, and with water based coatings not subject to tannin staining. Water based coatings may require an oil based stain blocker as an intermediate application. Corro Seal® is non flammable and non corrosive.

DOT shipping classification 55

Universal Customs Code 3810.10

Basic Use

Corro Seal® is recommended for use on rusted or partially rusted steel surfaces as a rust converter / paint primer, and as an etch primer on aged tight paint of any color, and as a sealer on non ferrous metals such as some aluminum, copper, and brass.

- Protects against future rusting
- Can be used on welds
- Eliminates need to mechanically blast to white metal in many instances
- Not recommended for outside hull underwater applications

Packaging

Corro Seal® is packaged in quarts, gallons, five gallon buckets and 52 gallon drums.

Thinning

DO NOT THIN

Coverage

The actual surface condition and thickness of rust will dictate the amount of Corro Seal® needed. For estimating purposes, 1 gallon of Corro Seal® covers approximately 200 square feet.

Cautions

Do not use in direct contact with food or potable water. Refer to the [Corro Seal MSDS \(msds.aspx\)](#) and label for precautionary information.

SURFACE PREPARATION

Remove all salt, loose rust, mill scale, dirt, grease, oil, old paint and other deposits. Apply solvent cleaner according to manufacturer's directions and rinse. A residue free surface is essential before coating application begins. The surface should be a CLEAN, TIGHT RUST.

Notes

Do NOT use Acetone or dishwashing detergent to clean rusted steel surface. When black color appears, rust conversion has started. If gray areas appear apply more Corro Seal® while surface is tacky.

APPLICATION

Brush, roll or spray undiluted Corro Seal® in a heavy white coat with no surface show through at 8-10 mils wet film thickness. When black color appears, rust conversion has started. Wait at least 24 hours before top coating. A second coat of Corro Seal® may be applied while first coat is still tacky. Apply all topcoats according to manufacturer's specifications. Use oil based marine or industrial coatings for best weather protection.

Application Conditions

Keep from freezing, Apply at 45°F and rising and below 100°F(7°-37°C) and falling. Test over zinc based coatings as some galvanizing reject Corro Seal® chemistry. Do not apply onto zinc chromate or phosphates, lead, magnesium, copper powder, graphite, borate pigments. Chromate-treated (pickled) prefabricated steel building cold rolled perlin and gutters are to remain dry until top coated. Cold rolled steel can require abrading to anchor profile and degrease.

Application Method

Brush roll or spray undiluted Corro Seal® in a heavy white coat with no surface show through at 8-10 mils wet film thickness.

Limitations

Waterborne topcoats subject to tannin staining must be tested 48-60 hours before use. If tannin staining occurs, apply oil based stain blocker or apply oil based topcoat. Always prepare a test patch to ensure compatibility with substrate and follow-on coatings.

DRY TIME**Dry time to re-coat**

Wait at least 24 hours to top coat.

TECHNICAL SERVICES

Technical advice is available by calling Corro Seal® at 1-800-237-1573 or email inquiries to info@corro Seal.com. Visit www.corro Seal.com for more information. Made in the USA by Rodda Paint Company (<http://www.rodapaint.com>), Portland Oregon.



**Rustbond® &
Rustbond® FC**

MARINE/OFFSHORE COATINGS

product data

Selection & Specification Data

Generic Type	Polymeric epoxy amine.				
Description	Rustbond and Rustbond FC are cross-linked penetrating primer/sealers with excellent wetting properties. They are highly flexible with good chemical and solvent resistance, and accept a variety of topcoats. Recommended use as primer/sealers for marginally prepared steel and over old coatings. Their excellent wetting properties allows them to penetrate rust and discontinuities in existing coatings and provide a firm anchorage for a variety of topcoats. Their thixotropic character reduces run off, ensuring that the edges of existing coatings are encapsulated thus reducing undercutting and peeling. They may also be used as a tie-coat for coatings that exceed their "recoat window." Consult Carboline Technical Services Department for specific recommendations.				
Features	<ul style="list-style-type: none">▪ Universal primer and tie-coat▪ Cures down to 35°F (2°C). (FC only)▪ Excellent adhesion to SSPC-SP 2 prepared steel, galvanizing, aluminum, stainless steel and copper▪ Low stress, highly flexible film▪ Extremely high solids▪ Low odor▪ Contains corrosion inhibitors▪ Compatible with a variety of topcoats▪ User friendly brush and roller application▪ VOC compliant to current AIM regulations				
Color	Translucent Green (0300)				
Primers	Self-priming. May be applied over most generic types of coatings.				
Finish	High Gloss. Chalks rapidly in sunlight.				
Topcoats	Acrylics, Alkyds, Epoxies, Polyurethanes, drying oils				
Dry Film Thickness	1.0-2.0 mils (25-50 microns) per coat				
Solids Content By Volume	<table><tr><td><u>Rustbond</u></td><td><u>Rustbond FC</u></td></tr><tr><td>99% ± 1%</td><td>90% ± 1%</td></tr></table>	<u>Rustbond</u>	<u>Rustbond FC</u>	99% ± 1%	90% ± 1%
<u>Rustbond</u>	<u>Rustbond FC</u>				
99% ± 1%	90% ± 1%				
Theoretical Coverage Rate Rustbond	1572 mil ft ² (38.5 m ² /l at 25 microns) 786 ft ² at 2 mils (19.3 m ² /l at 50 microns) Allow for loss in mixing and application				
Theoretical Coverage Rate Rustbond FC	1443 mil ft ² (38.5 m ² /l at 25 microns) 722 ft ² at 2 mils (19.3 m ² /l at 50 microns) Allow for loss in mixing and application				
VOC Values Rustbond	EPA Method 24: 0.7 lbs/gal (85 g/l) 12 oz/gal w/#76: 1.22 lbs/gal (147 g/l)				
VOC Values Rustbond FC	EPA Method 24: 0.9 lbs/gal (108 g/l) 7 oz/gal w/#2: 1.22 lbs/gal (147g/l) 8 oz/gal w/#76: 1.24 lbs/gal (149 g/l)				
Dry Temp. Resistance	Continuous: 175°F (80°C) Non-Continuous: 200°F (93°C) Discoloration and loss of gloss is observed above 175°F (80°C).				
Limitations	<ul style="list-style-type: none">▪ Epoxies lose gloss, discolor and eventually chalk in sunlight exposure▪ Do not use for immersion service▪ Rustbond sealers must be topcoated				

Substrates & Surface Preparation

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	SSPC-SP2 or SP3
Previously Painted Surfaces	A test patch is recommended to verify compatibility with existing coating. Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Scribe" adhesion test.

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

General guidelines:

Spray Application (General)	Contact Carboline Technical Service for specific application instructions.
Brush & Roller (General)	Avoid excessive re-brushing or re-rolling. Apply enough material to uniformly wet the surface. Any puddles formed must be brushed out.
Brush	Use a medium bristle brush and distribute evenly using full brush strokes.
Roller	Use a medium to long nap roller, suitable for solvent base materials, to evenly distribute the material.

Mixing & Thinning

Mixing	Power mix components separately to break down any gel. Keep the mixing blade at slow speed and submerged in the product to minimize whipping of air into the material. <u>Scrape the sides of the container occasionally to insure uniformity.</u> Continue to mix for 1-2 minutes. DO NOT MIX PARTIAL KITS, and do not intermix unpaired components.	
Ratio	<u>.5 Gallon Kit</u>	<u>2 Gallon Kit</u>
	Rustbond & FC Part A: 1 Quart	1 Gallon
	Rustbond & FC Part B: 1 Quart	1 Gallon
Thinning	Thinning not normally required for Rustbond, but may be thinned up to 9% (12 oz/gal) with Thinner #76. Rustbond FC may be thinned up to 6% (8 oz/gal) with Thinner #76 or Thinner #2. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether express or implied.	
Pot Life Rustbond (Qty is ½ gallon)	80 minutes at 70°F (21°C) 50 minutes at 80°F (27°C) 40 minutes at 90°F (32°C) 30 minutes at 100°F (38°C) Pot life ends when material begins to thicken and exotherm.	
Pot Life Rustbond FC (Qty is ½ gallon)	45 minutes at 75°F (28°C), 90 minutes at 40°F and longer at lower temperatures. Do not use above 75°F (28°C) material temperature. Pot life ends when material begins to thicken and exotherm. Any unused quantities will become extremely hot and will generate smoke and fumes. Immediately spread out on an appropriate surface or add sand or other suitable heat sink to the unused material to reduce the severity of exotherm. Take appropriate precautions against breathing fumes.	

August 2014 replaces March 2011

0922/0939

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Carboline® and Rustbond® are registered trademarks of Carboline Company.

Rustbond® & Rustbond® FC

Cleanup & Safety

Cleanup Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

Safety Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

Ventilation When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator.

Caution This product exotherms at the end of its pot life. Any unused quantities will become extremely hot. Immediately spread out on an appropriate surface or add sand or other suitable heat sink to the unused material to reduce the severity of exotherm. Take appropriate precautions against breathing fumes. This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

Application Conditions

Rustbond

Condition	Material	Surface	Ambient	Humidity
Normal	70°-90°F (21-32°C)	80°-100°F (27-38°C)	80°-100°F (27-38°C)	0-80%
Minimum	60°F (16°C)	70°F (21°C)	70°F (21°C)	0%
Maximum	100°F (38°C)	130°F (54°C)	110°F (43°C)	90%

Rustbond FC

Condition	Material	Surface	Ambient	Humidity
Normal	40°-70°F (5-21°C)	40°-70°F (5-21°C)	40°-70°F (5-21°C)	0-80%
Minimum	40°F (5°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	75°F (24°C)	90°F (32°C)	90°F (32°C)	90%

These products simply require the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

Curing Schedule

Rustbond

Surface Temp. & 50% Relative Humidity	Dry to Handle	Dry to Topcoat	Final Cure
70°F (21°C)	34 Hours	18 Hours	9 Days
80°F (26°C)	22 Hours	12 Hours	6 Days
90°F (32°C)	14 Hours	9 Hours	4 Days
100°F (38°C)	11 Hours	4 Hours	3 Days

Rustbond FC

Surface Temp. & 50% Relative Humidity	Dry to Handle	Dry to Topcoat	Final Cure
35°F (2°C)	23 Hours	23 Hours	9 Days
50°F (10°C)	18 Hours	18 Hours	6 Days
75°F (24°C)	6 Hours	6 Hours	3 Days
90°F (32°C)	3 Hours	3 Hours	2 Days

These times are based on a 1.0–2.0 mils (25-50 microns) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing.

Rustbond

Surface Temp. & 50% Relative Humidity	Maximum Recoat Time Epoxies & Urethanes	Maximum Recoat Time Acrylics & Alkyds
50°F (10°C)	30 Days	14 Days
75°F (24°C)	30 Days	14 Days
90°F (32°C)	15 Days	7 Days

Rustbond FC

Surface Temp. & 50% Relative Humidity	Maximum Recoat Time Epoxies & Urethanes	Maximum Recoat Time Acrylics & Alkyds
35°F (2°C)	21 Days	7 Days
50°F (10°C)	21 Days	7 Days
75°F (24°C)	21 Days	7 Days

If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting, or by the application of another coat of Rustbond FC before applying any additional coatings.

Packaging, Handling & Storage

Shipping Weight (Approximate) Rustbond	<u>0.5 Gallon Kit</u> 6 lbs. (3 kg)	<u>2 Gallon Kit</u> 22 lbs. (10 kg)
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Shipping Weight (Approximate) Rustbond FC	<u>0.5 Gallon Kit</u> 5 lbs. (2.2 kg)	<u>2 Gallon Kit</u> 19 lbs. (8.6 kg)
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Flash Point (Setaflash)	Rustbond Part A: 205°F (96°C) Rustbond Part B: 176°F (80°C) Rustbond FC Part A: 45°F (7.2°C) Rustbond FC Part B: 42°F (6°C)
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Storage Temperature & Humidity	40° - 110°F (4°-43°C) Store indoors. 0-90% Relative Humidity
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Shelf Life: Rustbond	Part A & B: Min. 36 months at 75°F (24°C)
Rustbond FC	Part A & B: Min. 36 months at 75°F (24°C)

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**



An **RPM** Company

August 2014 replaces March 2011

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Armour Shield® XP Aliphatic Urethane
 837-Series
 - Acrylic /Polyester Urethane - White Base

Description

The Armourshield XP line of coatings are tightly crosslinked interpenetrating polymer networks of acrylic and polyester urethanes. Virtually HAPS free (<1%), high performance, VOC compliant aliphatic urethanes that provide superior gloss and color retention, excellent chemical resistance, outstanding abrasion resistance, and a very high gloss ("wet look") finish. Armourshield XP is a two component product with base 837 series A and converter 83ARMB supplied in separate containers.

Coating Properties

Coating Category	Acrylic /Polyester Urethane
Mix Ratio	4:1
Viscosity (Mixed) - KU	30 - 55 Seconds #2 Zahn cup
Pot Life (at 50% RH)	2 hours at 25° C. (77 ° F.)
Induction Time	None
Gloss	Very High Gloss - "Wet Look"
Shelf Life	2 years on both part A and part B.

Coverage Information

Volume Solids	60%
Wet Film Thickness	4.0 - 6.0 mils
Dry Film Thickness	2.0 - 4.0 mils
Theoretical Coverage	962 square feet per gallon @ 1 mil DFT. Actual coverage may vary depending on substrate, application methods, and specified dry film thickness.
Applied Coverage	267 - 400 Sq Ft / Gal
Recommended Film Thickness	Actual coverage will vary depending on substrate and application method. Please contact your Sales Representative for specific project recommendations.

Approvals / Certifications

- AWWA D102
- MPI 72
- OCS 5/6

Benefits

- Fast Dry
- Outstanding Application
- Chemical Barrier
- UV Resistant
- Chemical Resistant
- Low VOC
- Excellent Weathering

Markets / End-Uses

- Farm Machinery
- Aircraft
- Storage Tank Exteriors
- Structural Steel
- Process Equipment
- Commercial Transport
- Oil Field/Refinery Work

Bases / VOCs (g/L)

83700A	White Base	< 340
83705A	Yellow Base	< 340
83701A	Deep Base	< 340
83706A	Red Base	< 340
83703A	Clear Base	< 340
83707A	Green Base	< 340
83709A	Blue Base	< 340
83ARMB		

Substrates and Surface Preparation

WARNING! If you scrape, sand or remove old lead paint from any surface you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. For additional information, Canadian customers contact the Product Safety division of Health Canada at 1-800-O-CANADA, US customers contact the U.S. EPA/Lead Information Hotline at 1-800-424-LEAD (5323).

Surface preparation is important. All surfaces must be smooth, clean, dry, free of mildew, grease, soap film, sanding dust or other contaminants. Remove all loose or peeling material from previously-painted surfaces. Wash all surfaces with a solution of 3 tablespoons of (Phosphate-free) TSP in a gallon of warm water. Rinse thoroughly, allow to dry and then scuff sand using 80-120 grit sandpaper on a hand sander. Remove all sanding dust. Do not apply at temperatures below 10°C (50°F).

Steel: SSPC-SP6 Commercial Blast Cleaning is minimum, SSPC-SP10 Near White Blast Cleaning is recommended for optimum coating performance. Steel should be coated soon after sandblasting to prevent flash rusting. Galvanized: SSPC-SP1 Solvent Cleaning. Smooth galvanized surfaces should be roughened lightly.

System Recommendations

Ferrous Metal: ClovaPrime 21, ClovaZinc 3

Non-Ferrous Metal: ClovaBond

Mixing Instructions

Mix base component A and curing agent B separately with good agitation. Add curing agent to base component and mix thoroughly until homogenous. No induction time is required.

Methods of Application

Application Parameters

Relative Humidity	Not to exceed 80 %
Minimum Temperature	10 ° C. (50 ° F.)
Maximum Temperature	35 °C. (95 ° F.)
Continuous:	93° C (200° F)
Intermittent:	120° C (250° F)
Technical Notes	After Armour Shield has cured for more than 3 days the surface will require sanding for adhesion purposes for subsequent coats.
Performance Tips	Urethanes are sensitive to moisture. Moisture in the air line or dew on freshly painted surfaces. This can cause a change in gloss. Bleed your moisture traps regularly and quit painting in the early afternoon if you suspect evening dew.

Substrates

- Ferrous Metals
- Non-Ferrous Metals
- Fibreglass

Reducers

760-1 Slow Evaporating Urethane
Thinner or 760-2 HAPS FREE Medium
Evaporating Urethane
Thinner

Equipment Cleaning

Use MEK for equipment clean up.

Product Weight

1.21 kg / Liter (10.14 lbs / gal)

Equipment Settings

Airless Spray: Pressure 2,000 psi, Tip 0.011" - 0.015"

HVLP: 8 - 10 psi cap pressure. <insert fluid tip 1.1 - 2.2 range> fluid tip

Conventional: 15 - 20 psi fluid pressure, 30 - 50 psi atomizing pressure. <insert fluid tip size 0.7 - 2.2 range> fluid tip size

Brush/Roller: Brushing is limited to small areas or touch-up. For waterbase paints use a good quality nylon brush and use a good quality natural bristle brush with solvent base coatings. Use a 1/4"- 3/8" nap roller cover with a phenolic core.

Drying Times

Substrate Temperature	Touch Dry	Hard Dry	Overcoat Times
10° C (50° F)	4 hrs	12 hrs	24 hrs
25° C (77° F)	2hrs	6-8 hrs	12 hrs
40° C (104° F)	1 hr	3 hrs	6 hrs

Recoat Times

Substrate Temperature	Touch Dry	Hard Dry	Tape Time
10° C (50° F)	4 hrs	12 hrs	
25° C (77° F)	2hrs	6-8 hrs	7-8 hrs
40° C (104° F)	1 hr	3 hrs	

Performance Criteria

Performance Test	Method	Results
Flexibility	ASTM D522	32% elongation
Impact Resistance (direct)	ASTM D2794	184 Kg per Cm (160 lbs. per inch) minimum
Pencil Hardness	ASTM D3363	2B minimum
QUV Accelerated Weathering	ASTM D4587	4954 hrs, DE-3.15 gloss loss @ 60 = 5, @ 20 = 15

Safety Precautions

Safety Precautions: This product is for industrial use only. **Refer to Material Safety Data Sheet for proper health and safety information.**

For detailed information please refer to this product's material safety data sheet. A Copy of which may be found at our website:

www.cloverdalepaint.com

Updates

Please visit www.cloverdalepaint.com for the most recent versions of Technical Data Sheets and Material Safety Data Sheets.

Last Modification date: 02/26/2016

LIMITATION OF LIABILITY

To the best of our knowledge, the technical data contained herein are true and accurate at the time of issuance but are subject to change without prior notice. We guarantee our product to conform to the specifications contained

herein. All technical advice, recommendations and services regarding this product are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable and are intended for use by persons having skill and know-how, at their discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from this product use by Buyer whether as recommended herein or otherwise. Such recommendations, technical advice or services are not to be taken as a license to operate under or suggest infringement of any patent.

WARRANTY

Cloverdale Paint Inc. warrants its products to be free from defects in material and workmanship. At its option, Cloverdale Paint Inc. will either replace products not conforming to this warranty or credit the Buyer's account the invoiced amount for the non-conforming products. This is Cloverdale Paint Inc.'s sole obligation and Buyer's exclusive remedy in connection with the products. In no event shall Cloverdale Paint Inc. be liable for special, indirect, consequential or incidental damages.

By purchasing this product the Buyer accepts this warranty in lieu of all others, and waives all claims to any other remedy arising from any warranty or guarantee of quality, whether such warranty or guarantee of quality was made expressly to the Buyer or implied by any applicable law.

Any claim under this warranty must be made in writing by the Buyer to Cloverdale Paint Inc. within ten (10) days of discovery of the claimed non-conformance, but in no event later than one (1) year from the delivery date. The Buyer's failure to notify Cloverdale Paint Inc. of such non-conformance as required herein shall bar the Buyer from recovery under this warranty.

READ LABEL AND SAFETY DATA SHEET PRIOR TO USE.



SharkSkin[®]

THE ULTIMATE IN WATER-REPELLANT SCUFF-RESISTANT PROTECTION

SharkSkin[®] Deck and Siding Stain 72403



COMPLIANCE INDICATORS

at 09/01/2015



DESCRIPTION

The ultimate in Deck & Siding protection! An exterior 100% acrylic solid hide stain developed with the industry's latest hybrid waterborne technology that provides superior adhesion, durability and resistance to cracking, peeling, and blistering. Formulated with fewer volatile solvents and additional mold & mildew inhibitors compared to conventional solid hide stains.

RECOMMENDED USES

- Exterior wood decks, patios, stair treads or other horizontal surfaces
- Wood, composite or cement board siding
- Fences, deck railings, soffits, trim
- Exterior stucco or other cementitious surfaces

FEATURES

- Hybrid technology - Urethane/Oil performance in a water-based stain
- Durable scuff and mar resistant coating
- Guaranteed performance on both horizontal and vertical applications
- Protects against mould, mildew and algae growth on the surface of the stain

TECHNICAL CHARACTERISTICS

Bases	VOC(g/L)*
White Base (72403)	< 150
Deep Base (72401)	< 150
Neutral Base (72404)	< 150

*Before thinning and the addition of colorants

TINTING TYPE

Universal Colourants

FINISH

Gloss Category: Gloss Level 2 - 'Eggshell' Finish

Gloss: <10 units at 60 degree angle

SOLIDS & DENSITY

Volume: 37%

Weight: 52%

Density: 10.84lbs per gallon. Container extra

FILM THICKNESS (PER COAT)

Wet: 3.9 - 6.8 mils (100 - 170 microns)

Dry: 1.5 - 2.5 mils (38 - 63 microns)

THEORETICAL COVERAGE (PER COAT):

5.9 - 9.8 ft² per gallon (240 - 400 m²/L)

VISCOSITY

75 - 80 KU

DRYING TIME

at 77°F and 50% Relative Humidity

Tack Free: 45 minutes

Re-Coat: 4-6 hours

REDUCERS

Not normally recommended, sparingly with water for spray applications

CLEAN UP

Warm, soapy water

SHELF LIFE

Two year minimum, unopened

STORAGE TEMPERATURE

4°C (40°F) - 32°C (90°F) Keep from freezing



SURFACE PREPARATION

ALL SURFACES: Surface preparation is important. All surfaces must be smooth, clean, dry, free of mildew, grease, soap film, sanding dust or other contaminants. Remove all loose or peeling material from previously-painted surfaces. Wash all surfaces with a solution of 3 tablespoons of (Phosphate-free) TSP in a gallon of warm water. Rinse thoroughly, allow to dry and then scuff sand using 80-120 grit sandpaper on a hand sander. Remove all sanding dust. Do not apply at temperatures below 10°C (50°F).

WARNING! If you scrape, sand or remove old lead paint from any surface you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. For additional information, Canadian customers contact the Product Safety division of Health Canada at 1-800-O-CANADA, US customers contact the U.S. EPA/Lead Information Hotline at 1-800-424-LEAD (5323).

GENERAL PREPARATION & APPLICATION TIPS FOR DECKS: Painting your wood deck can be the most challenging painting project around the home. Construction lumber is an unstable substrate at the best of times, however, when laid out parallel to the ground with extreme hot and cold on the top surface combined with high moisture generation on the bottom side, the need to do it right becomes much more of a requirement. Deck coatings can be subjected to the sun's intense UV radiation, ponding water, ice, salt, hot tub chemicals, abrasive grit, snow shovels and scrapers, high pressure washers, mildew and algae growth to name a few of the exposures that deck coatings are required to withstand. All this protection is asked of only a few thousands of an inch of surface coating.

SURFACE PREPARATION FOR NEW DECKS:

- › Decks must be constructed properly. Avoid exposed trim ends as much as possible as these are the natural routes of moisture entry into the wood.
- › Dressed lumber deck boards with a high sheen level such as Pine or Fir need to have this mill glaze removed by sanding with 80 grit sandpaper.
- › Spindles and balusters should be trimmed at an angle to encourage water run-off and sit above the deck surface to minimize the possibility of moisture wicking up into the end grain. Trim ends should be spot primed during construction with 15130 alkyd stain blocking primer.
- › Deck boards should be spaced sufficiently to allow ventilation between boards. Hand rails and caps should have a drip edge to shed moisture. A gradual slope away from the house keeps the surface free of ponding water.
- › Dimensioned lumber deck boards must be prime coated on all 6 sides with oil-based 1510 alkyd stain blocking primer prior to installation.
- › A moisture barrier on near grade level decks is always recommended.
- › All deck lumber must be allowed to season for 2-4 weeks after construction during normally dry conditions prior to staining. Pressure treated wood must season for 4 weeks minimum.

SURFACE PREPARATION FOR EXISTING DECKS:

- › Existing decks must be thoroughly cleaned prior to re-painting. Mildew and algae must be cleaned and neutralized using a solution of 1 part bleach to 4 parts water. This solution must remain in contact with the mildew or algae for at least 15 minutes then rinsed. Protect plants and water sources.
- › Loose or popping nail heads should be pulled and replaced with a galvanized nail of a larger size. Nail or screw heads should be countersunk to not create a tripping hazard. Fill all nail heads with a suitable exterior filler. All cracks or checks in the deck boards or other gaps where moisture could penetrate into the lumber should be filled with a caulking material.
- › No Primer Required! SharkSkin is self-priming on properly prepared new or weathered wood and previously painted surfaces when applied following full label and Technical Data Sheet instructions.

IMPORTANT NOTES:

- › If your deck has had a history of repeated paint or stain failure and your deck boards are not protected on the underside by a primer coat or moisture barrier, your deck may not be suitable for SharkSkin.
- › A fresh coat of SharkSkin will not stop the spread of rot. All soft or rotted boards need to be replaced with a rot-resistant wood such as cedar or pressure treated woods prior to re-staining.

GENERAL DECK PREPARATION TIPS:

- › Stay tuned to the short and long term weather forecasts! Do not apply stain in direct sunlight or within 6 hours before or after a rainfall. Surface temperatures of the wood should be below 35°C (95°F).
- › Application conditions should be between 10-30°C (50-86°F). Apply by synthetic brush and a 10-20mm (3/8-3/4") roller sleeve using full, even coats maintaining a 'wet edge'.





Cloverdale Paint TECHNICAL DATA SHEET

- Buy enough stain to complete the project. If disposal is necessary, give the stain to someone who can use it, or contact your municipality or www.productcare.org to understand recycling options in your area.

APPLICATION

Apply at recommended coverage rates per coat. A minimum of 2 coats are recommended. Coverage will be less on more porous or textured surfaces. Do not overbuild this product. Calculate the area to be coated and use the appropriate amount of product based on the coverage rate. Thinning is not normally required, but may be thinned up to 10% with clean water for HVLP spray applications. Cooler temperatures, higher humidity, or excess film build will extend dry time. Apply only in dry conditions. See Safety Precaution: Limitations, for temperature and weather condition information. Stir well before and during use. For best results use premium quality painting tools. Always apply coating at the recommended spread rate. To avoid lap marks, keep a 'wet edge' by stopping only at natural breaks.

Application Equipment

Brush: Use a synthetic bristle brush

Roller: Use a 10mm - 20mm nap synthetic cover

HVLP Spray: 1.3 cap pressure -10-20 psi

Airless Spray: Pressure 1800-2000 psi, Tip .013" - .015"

SAFETY PRECAUTIONS

For detailed information please refer to MSDS

Warning

Keep from Freezing. USE WITH ADEQUATE VENTILATION. Close container after EACH use. Keep out of reach of children. Do not take internally.

First Aid: In case of eye contact, flush immediately with plenty of water for at least 15 minutes. Wash contaminated skin with soap and water. If ingested, call physician or the Poison Control Centre immediately.

LIMITATIONS

Apply only in dry conditions. Apply when surface and ambient temperature is between 10°C (50° F) and 30° C (86° F). Temperatures must remain in this range for at least 6 hours after application. Do not apply when relative humidity is above 85% or if deck surface temperature is above 35° C (95° F).

Recent Amendments

Check for recent amendments to this data sheet at www.cloverdalepaint.com

Last Modification date: 05/18/2016

LIMITATION OF LIABILITY

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WARRANTY

Cloverdale Paint Inc. warrants its products to be free from defects in material and workmanship. At its option, Cloverdale Paint Inc. will either replace products not conforming to this warranty or credit the Buyer's account the invoiced amount for the non-conforming products. This is Cloverdale Paint Inc.'s sole obligation and Buyer's exclusive remedy in connection with the products. In no event shall Cloverdale Paint Inc. be liable for special, indirect, consequential or incidental damages.

By purchasing this product the Buyer accepts this warranty in lieu of all others, and waives all claims to any other remedy arising from any warranty or guarantee of quality, whether such warranty or guarantee of quality was made expressly to the Buyer or implied by any applicable law.

Any claim under this warranty must be made in writing by the Buyer to Cloverdale Paint Inc. within ten (10) days of discovery of the claimed non-conformance, but in no event later than one (1) year from the delivery date. The Buyer's failure to notify Cloverdale Paint Inc. of such non-conformance as required herein shall bar the Buyer from recovery under this warranty.

READ LABEL AND SAFETY DATA SHEET PRIOR TO USE.



Cloverdale Paint

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