

SPECIFICATION FOR EXTERIOR COATINGS

EL PASO PLANT - ASARCO, INC.

1. Scope and Intent

This specification provides requirements for the application of protective coatings on all types of exterior surfaces throughout the El Paso Plant of ASARCO, Inc.

It is intended that all work shall be done in a workmanlike manner with no disruption or hindrance of plant operations unless arrangements have been previously made.

2. Selection of Coating Systems

Coatings used for various types of surfaces shall be selected from the following table. Coatings listed are primarily DuPont products. No substitutions shall be made unless such substitutions are previously approved by owner. The systems shown in the table are not intended as complete instructions for required work especially in the case of surface preparation. For example, if it is obvious that solvent cleaning is desirable to eliminate the possibility of a greasy or oily film on the surface to be painted, such cleaning will precede other methods in accordance with specification SSPC-SP1-63. In all cases the work shall be done in a manner which will meet the requirements of the applicable specifications of Steel Structures Painting Council.

May 1, 1977

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<u>Type of Surface</u>	<u>Recoat</u>	<u>New Construction</u>
Structural steel, piping, tanks, and black iron siding		
Non-chemical environment to 150°F	3	4
High color retention, chemical environment	5	6
Steel with 150°F to 800°F surface temperature	7	7
Galvanized steel siding	8	8
Transite siding	9	9
Masonry surfaces and wood trim	10	10
Steel columns where attacked by corrosive deposits (bottom 6 feet)	11	11
Sulfuric Acid Plant, steel	12	12

3. Color Guidelines (DuPont Standard Colors)

Masonry and wood buildings including trim to be painted Canyon Sand.

Metal and transite siding on buildings to be Loam Brown in ore handling and other locations subject to heavy accumulations of dust from plant operations. Siding in other areas to be Desert Beige.

Structural steel to be Loam Brown in dust accumulation areas and Shale Gray in other areas. Note that a special specification is used for bottom six feet of columns in corrosive dust environments. Hot metal surfaces to be high temperature aluminum as noted in specifications.

PAINTING SYSTEM FOR EXTERIOR HAND CLEANED STEEL SURFACES
(AMBIENT TO 150°F SURFACE TEMPERATURE)

Surface Preparation

Hand or power tool clean to a degree of cleanliness specified by the Steel Structures Painting Council SSPC-SP2-63 or SSPC-SP3-63. Requires removal of all loose rust, loose mill scale, dirt, grease, loose paint and other contamination.

Spot Prime

DuPont 373-851 Red Lead Primer at 1.5 to 2.0 mils dry film thickness. Allow to overnight dry.

Prime

DuPont 373-851 Red Lead Primer at 1.5 to 2.0 mils dry film thickness. Overnight dry.

Finish

2 coats 81-Line DuPont Dulux Enamel at 1.5 mils dry film thickness.

PAINTING SYSTEM FOR EXTERIOR SANDBLASTED STEEL SURFACES
(AMBIENT TO 150°F SURFACE TEMPERATURE)
NON-CHEMICAL ENVIRONMENT

Surface Preparation

Sandblast to "Commercial Blast" as defined by Steel Structures Painting Council, SSPC-SP6-63. Requires removal of all mill scale, rust, surface contamination and old finish. Prime immediately to prevent degradation of the blasted surface.

Prime

DuPont #373-851 Red Lead Primer at 1.5 to 2.0 mils dry film thickness. Allow overnight dry to top coat.

Intermediate

DuPont #67-813 Buff Intermediate Primer at 1.5 to 2.0 mils dry film thickness. Allow overnight dry to top coat.

Finish

81-Line DuPont Dulux Enamel at 1.5 to 2.0 mils, dry film thickness.

POLYURETHANE PAINTING SYSTEM FOR HAND-CLEANED SURFACES
IN CHEMICAL ENVIRONMENTS

Due to sacrifice in surface preparation this system should only be used when it has been determined sand-blasting is impractical.

Surface Preparation

Hand clean or power-tool clean to Steel Structures Painting Council Specification SSPC-SP3-63 or SSPC-SP2-63. Remove all dirt, grease, oil, rust, loose mill scale and other surface contamination. Previously painted surfaces in good condition should be thoroughly cleaned of all contamination and dried prior to refinishing. Sand to smooth surface and to remove gloss of the old finish.

Prime Coat

BARE STEEL - DuPont 373-851 Rust Resistant Metal Primer at a dry film thickness of 1.5 to 2.0 mils. Allow overnight dry to top coat. PREVIOUSLY PAINTED SURFACES - No primer required.

FINISH COAT(S)

Two coats INRON Polyurethane Enamel (326-Line) at a minimum dry film thickness of 1.5 mils per coat.

EPOXY/POLYURETHANE PAINTING SYSTEM FOR EXTERIOR SANDBLASTED
STEEL SURFACES
(AMBIENT TO 200°F SURFACE TEMPERATURE)
CHEMICAL ENVIRONMENT

Surface Preparation

Sandblast to "Commercial Blast" as defined by Steel Structures Painting Council SSPC-SP6-63. Requires removal of all mill scale, rust, surface contamination, and old finish. Prime immediately to prevent degradation of the blasted surface.

Prime

DuPont #825-8031/VG-8330 Corlar Epoxy Primer at 1.5 to 2.0 mils dry film thickness. Allow 4 hours dry to top coat by spray - 10 hours to top coat by brush or roll.

Finish

Apply one coat of DuPont #360 Line Iron High Build Enamel of the color desired to obtain a dry film thickness of 5.0 to 6.0 mils D.F.T.

PAINING SYSTEM FOR HIGH TEMPERATURE SERVICE
150°F-800°F SURFACE TEMPERATURE

Surface Preparation

Sandblast to "White Metal" as described by Steel Structures Painting Council SSPC-SP5-63. Requires removal of all mill scale, rust, dirt, grease, old paint, rust stains, gray oxide and other contamination. Prime immediately to prevent degradation of the blasted surface.

Prime

DuPont 347-931 "Ganicin" Self-Cure Inorganic Zinc at 2.5 to 3.0 mils dry film thickness. Allow overnight cure.

Finish

DuPont 612-706 Silicone High Temperature Aluminum at a dry film thickness of 0.6 to 0.8 mils.

PAINTING SYSTEM FOR GALVANIZED STEEL SIDING

Surface Preparation

GALVANIZED METAL - Surface must be clean and dry. Wipe surface clean with a suitable solvent to remove oil, grease and other contamination. Remove white deposit on weathered galvanized metal with soap and water then thoroughly rinse with clear water. New galvanized sheets are frequently coated at the mill to prevent "white rust." Consult the supplier regarding necessity for removal prior to painting.

Prime

DuPont 823-Line/VG-8339 Corlar Epoxy Enamel at 1.5 to 2.0 mils dry film thickness. Top coat within 72 hours using 81 line or 310 line.

Finish

Gloss - Apply two coats of DuPont 81 line Dulux Gloss Enamel of the color indicated in the color scheme to obtain 2.5 to 3.0 mils dry film thickness.

Flat - Apply two coats of DuPont 310 line Lucite Acrylic Latex Flat of the color indicated in the color scheme to obtain a dry film thickness of 2.5 to 3.0 mils.

PAINTING SYSTEM FOR TRANSITE SIDING

Surface Preparation

Water wash and hand clean to remove all dirt, grease, ore deposits, chalk or other contamination.

Finish

Apply two coats of DuPont 310 line Lucite Acrylic Finish Flat of the color indicated in the color scheme.

PAINTING SYSTEM FOR EXTERIOR WOOD AND MASONRY SURFACES

Surface Preparation

Clear thoroughly to remove all grease, dirt, loose paint, chalk, mildew and other contamination. New masonry should be allowed to completely cure and dry before painting.

Prime

NEW WOOD

Apply one coat of DuPont #51 Acrylic Latex Wood Primer. Allow 1 hour dry to recoat.

NEW BLOCK

Apply one coat of DuPont 330-263 Acrylic Block Filler at a spreading rate to obtain the degree of filling desired.

OTHER SURFACES

No primer.

Finish

Apply one or more coats of DuPont "Lucite" 310 Line Acrylic Flat or "Lucite" 315 Line Acrylic Enamel of the color desired. Allow 2 hours dry between coats.

**ZINC EPOXY PAINTING SYSTEM FOR CHEMICAL ENVIRONMENTS
(EXCEPT STRONG ACID)
(AMBIENT TO 200°F SURFACE TEMPERATURE)**

Surface Preparation

Sandblast to "Near White Metal" as designated by Steel Structures Painting Council SSPC-SP10-63T. Requires the removal of all rust, mill scale, paint, oil, grease and other contaminants to the gray oxide binder. Prime immediately to prevent degradation of the blasted surface.

Prime

DuPont #347-931 "Ganicin" Self-Cure Inorganic Zinc at a dry film thickness of 2.5 to 3.0 mils. Allow overnight cure.

Finish

DuPont 823 Line/VF 519 "Corlar" Catalized Epoxy, Color selected to obtain a dry film thickness 5.0 mils.

ZINC/VINYL PAINTING SYSTEM FOR ACETIC CHEMICAL ENVIRONMENT
(AMBIENT TO 150°F SURFACE TEMPERATURE)

Surface Preparation

Sandblast to "Near White Metal" as designated by Steel Structures Painting Council SSPC-SP10-63T. Requires the removal of all rust, mill scale, paint, oil, grease, and other contaminants to the gray oxide binder. Prime immediately to prevent degradation of the blasted surface.

Prime

DuPont #347-931 "Ganicin" Self-Cure Inorganic Zinc at a dry film thickness of 2.5 to 3.5 mils. Allow overnight cure.

Finish

Two coats DuPont 802-Line "Imlar" High Build Vinyl white, black, or gray to obtain a dry film thickness 6.0 mils minimum.