

DATE SUBMITTED 04/28/16
 SUBMITTED BY PLANNING DIRECTOR
 DATE ACTION REQUIRED 05/4/16

COUNCIL ACTION (x)
 PUBLIC HEARING REQUIRED ()
 RESOLUTION ()
 ORDINANCE 1ST READING ()
 ORDINANCE 2ND READING ()
 CITY CLERK'S INITIALS ()

**IMPERIAL CITY COUNCIL
 AGENDA ITEM**

SUBJECT: DISCUSSION/ACTION: PREPPING AND MARKING WATER TANK
 AWARD OF CONTRACT TO "DONOHUE PAINTING" IN THE AMOUNT OF \$49,700 FOR THE PREPPING AND MARKING WATER TANK
 CITY OF IMPERIAL BID NO. 2016-05

DEPARTMENT INVOLVED: BUILDING AND SAFETY/PUBLIC SERVICES

BACKGROUND/SUMMARY:
 FAA completed an airspace study of the water tank and issued a determination stipulating that the water tank must be marked and lighted as per FAA Advisory Circular 70 7460-1L. With the assistant of CALTRANS-Division of Aeronautics staff released a bid published on March 13, 2016 in the Imperial Valley Press and our City website as "BID NO. 2016-05" to solicit competitive bids from contractors to prep and mark the water tank as per Federal Aviation Administration AC 70 7460-1L, plans and project technical specifications. Proposals were not received, therefore "BID NO 2016-05" is considered as non-responsive. This concludes the City's compliance requirements with the Public Contract Code as it relates to the procurement process.
 The City began the negotiations with a local contractor who met the requirements specified in the Bidder's package (Bid No 2015-05). Staff reviewed the proposal and its components according to the bidder's package and the result is shown below:

Contractor	Total Bid Proposal
Donahue Painting	\$49,700

FISCAL IMPACT: \$49,700 F.O. INITIALS: _____

STAFF RECOMMENDATION:
 Staff recommend award of contract to ***"Donahue Painting"***
 in the amount of ***\$49,700***

MANAGER'S RECOMMENDATION: MANAGER'S INITIALS

MOTION:
 SECONDED: APPROVED () REJECTED ()
 AYES: DISAPPROVED () DEFERRED ()
 NAYES:
 ABSENT: REFERRED TO:



CA Contractor License No. 794956
(C33) Painting & Decoration

565 W. Belford Road
Imperial, CA 92251
Office... 760.355.1109
Fax..... 710.355.0014
Jack. 760.427.5992
J.D..... 760.427.5945
donohuepainting@att.net
www.DonohuePainting.com

Owner's Name: City of Imperial ATT: Rick Pankraft		Owner's Address: 420 South Imperial Avenue	
Owner's City: Imperial	Owner's Zip Code: 92251	Owner's Phone: 760-595-6318	Owner's Work Phone: 760-355-1152
Project Name & Address: Prepping & Obstruction Marking of Water Tank @ 201 South B St., Imperial, Ca 92251			Email:

a. Scope of Work: Donohue Painting hereby submits the following specifications and estimates:

Prevailing wage job.

- Pressure wash and prep the tanks surface.
- Treat the rusted areas with Rust Stop.
- Prime the complete top of the tank with Pro-Cryl Universal Primer and prime the body of the tank were needed.
- The top of the tank will be painted Aviation Orange and white, according to the frame work and the lay out of the top of the tank.
- The side walls of the tank will be in 5 feet alternating rectangles of Aviation Orange and white.
- The material will be Sher-Cryl HPA High Performance Acrylic Gloss.

- Scope of work:
- Set up
 - Man lifts
 - Pressure wash
 - Prep
 - Treat rust
 - Prime
 - Paint two coats white gloss enamel
 - Lay out rectangles
 - Paint two coats of Aviation Orange
 - Clean up and touch up
 - Total time estimated will be three weeks.

All insurance and other paper work will be turned in if awarded the job.

Labor	36,000.00
Material	9,500.00
Man lift	4,200.00

THIS LIST OF SPECIFICATIONS MAY BE CONTINUED ON SUBSEQUENT PAGES (SEE PAGE NUMBER BELOW)

b. Not Included: This proposal does not include

c. WE PROPOSE to furnish material, equipment and labor in accordance with the above specifications for the sum of:

\$49,700.00 dollars

NOTE: This proposal may be withdrawn if not accepted within 30 days from April 19, 2016

Respectfully submitted by: 
Company Representative

d. WE ACCEPT the prices, specifications, and terms as stated in this bid proposal are approved. We authorize you to draw up all necessary contract documents so work can begin.

approved and accepted (owner or owner's authorized agent) date

approved and accepted (second owner - If any) date

e. **Color Band Characteristics.** Bands for structures of any height should be:

1. Equal in width, provided each band is not less than 1 1/2 feet (0.5m) or more than 100 feet (31m) wide.
2. Perpendicular to the vertical axis with the bands at the top and bottom ends colored orange.
3. An odd number of bands on the structure.
4. Approximately one-seventh the height if the structure is 700 feet (214m) AGL or less. For each additional 200 feet (61m) or fraction thereof, add one (1) additional orange and one (1) additional white band.
5. Equal and in proportion to the structure's height AGL.

Structure Height to Bandwidth Ratio

Greater Than	Example: If a Structure is:	
	But Not More Than	Band Width
10.5 feet (3.2m)	700 feet (214m)	1/7 of height
701 feet (214m)	900 feet (275m)	1/9 of height
901 feet (275m)	1,100 feet (336m)	1/11 of height
1,100 feet (336m)	1,300 feet (397m)	1/13 of height

TBL 1

f. **Structures With a Cover or Roof.** If the structure has a cover or roof, the highest orange band should be continued to cover the entire top of the structure.

g. **Skeletal Structures Atop Buildings.** If a flagpole, skeletal structure, or similar object is erected on top of a building, the combined height of the object and building will determine whether marking is recommended; however, only the height of the object under study determines the width of the color bands.

h. **Partial Marking.** If marking is recommended for only a portion of a structure because of shielding by other objects or terrain, the width of the bands should be determined by the overall height of the structure. A minimum of three bands should be displayed on the upper portion of the structure.

i. **Teardrop Pattern.** Spherical water storage tanks with a single circular standpipe support may be marked in a teardrop-striped pattern. The tank should show alternate stripes of aviation orange and white. The stripes should extend from the top center of the tank to its supporting standpipe. The width of the stripes should be equal, and the width of each stripe at the greatest girth of the tank should not be less than 5 feet (1.5m) nor more than 15 feet (4.6m).

j. **Community Names.** If it is desirable to paint the name of the community on the side of a tank, the stripe pattern may be broken to serve this purpose. This open area should have a maximum height of 3 feet (0.9m).

k. **Exceptions.** Structural designs not conducive to standard markings may be marked as follows:

1. If it is not practical to color the roof of a structure in a checkerboard pattern, it may be colored solid orange.

2. If a spherical structure is not suitable for an exact checkerboard pattern, the shape of the rectangles may be modified to fit the shape of the surface.

3. Storage tanks not suitable for a checkerboard pattern may be colored by alternating bands of aviation orange and white or a limited checkerboard pattern applied to the upper one-third of the structure.

4. The skeletal framework of certain water, gas, and grain storage tanks may be excluded from the checkerboard pattern.

34. MARKERS

Markers are used to highlight structures when it is impractical to make them conspicuous by painting. Markers may also be used in addition to aviation orange and white paint when additional conspicuity is necessary for aviation safety. They should be displayed in conspicuous positions on or adjacent to the structures so as to retain the general definition of the structure. They should be recognizable in clear air from a distance of at least 4,000 feet (1219m) and in all directions from which aircraft are likely to approach. Markers should be distinctively shaped, i.e., spherical or cylindrical, so they are not mistaken for items that are used to convey other information. They should be replaced when faded or otherwise deteriorated.



CHAPTER 3. MARKING GUIDELINES

30. PURPOSE

This chapter provides recommended guidelines to make certain structures conspicuous to pilots during daylight hours. One way of achieving this conspicuity is by painting and/or marking these structures. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

31. PAINT COLORS

Alternate sections of aviation orange and white paint should be used as they provide maximum visibility of an obstruction by contrast in colors.

32. PAINT STANDARDS

The following standards should be followed. To be effective, the paint used should meet specific color requirements when freshly applied to a structure. Since all outdoor paints deteriorate with time and it is not practical to give a maintenance schedule for all climates, surfaces should be repainted when the color changes noticeably or its effectiveness is reduced by scaling, oxidation, chipping, or layers of contamination.

a. *Materials and Application.* Quality paint and materials should be selected to provide extra years of service. The paint should be compatible with the surfaces to be painted, including any previous coatings, and suitable for the environmental conditions. Surface preparation and paint application should be in accordance with manufacturer's recommendations.

Notes-

In-Service Aviation Orange Color Tolerance Charts are available from private suppliers for determining when repainting is required. The color should be sampled on the upper half of the structure, since weathering is greater there.

b. *Surfaces Not Requiring Paint.* Ladders, decks, and walkways of steel towers and similar structures need not be painted if a smooth surface presents a potential hazard to maintenance personnel. Paint may also be omitted from precision or critical surfaces if it would have an adverse effect on the transmission or radiation characteristics of a signal. However, the overall marking effect of the structure should not be reduced.

c. *Skeletal Structures.* Complete all marking/painting prior to, or immediately upon

completion of construction. This applies to catenary support structures, radio and television towers, and similar skeletal structures. To be effective, paint should be applied to all inner and outer surfaces of the framework.

33. PAINT PATTERNS

Paint patterns of various types are used to mark structures. The pattern to be used is determined by the size and shape of the structure. The following patterns are recommended.

a. *Solid Pattern.* Obstacles should be colored aviation orange if the structure has both horizontal and vertical dimensions not exceeding 10.5 feet (3.2m).

b. *Checkerboard Pattern.* Alternating rectangles of aviation orange and white are normally displayed on the following structures: OK

1. Water, gas, and grain storage tanks.
2. Buildings, as required.

3. Large structures exceeding 10.5 feet (3.2m) across having a horizontal dimension that is equal to or greater than the vertical dimension. OK

c. *Size of Patterns.* Sides of the checkerboard pattern should measure not less than 5 feet (1.5m) or more than 20 feet (6m) and should be as nearly square as possible. However, if it is impractical because of the size or shape of a structure, the patterns may have sides less than 5 feet (1.5m). When possible, corner surfaces should be colored orange. OK

d. *Alternate Bands.* Alternate bands of aviation orange and white are normally displayed on the following structures:

1. Communication towers and catenary support structures.
2. Poles.
3. Smokestacks.

4. Skeletal framework of storage tanks and similar structures.

5. Structures which appear narrow from a side view, that are 10.5 feet (3.2m) or more across and the horizontal dimension is less than the vertical dimension.

6. Coaxial cable, conduits, and other cables attached to the face of a tower

CHAPTER 12. MARKING AND LIGHTING EQUIPMENT AND INFORMATION

120. PURPOSE

This chapter lists documents relating to obstruction marking and lighting systems and where they may be obtained.

121. PAINT STANDARD

Paint and aviation colors/gloss, referred to in this publication should conform to Federal Standard FED-STD-595. Approved colors shall be formulated without the use of Lead, Zinc Chromate or other heavy metals to match International Orange, White and Yellow. All coatings shall be manufactured and labeled to meet Federal Environmental Protection Act Volatile Organic Compound(s) guidelines, including the National Volatile Organic Compound Emission Standards for architectural coatings.

a. Exterior Acrylic Waterborne Paint. Coating should be a ready mixed, 100% acrylic, exterior latex formulated for application directly to galvanized surfaces. Ferrous iron and steel or non-galvanized surfaces shall be primed with a manufacturer recommended primer compatible with the finish coat.

b. Exterior Solventborne Alkyd Based Paint. Coating should be ready mixed, alkyd-based, exterior enamel for application directly to non-galvanized surfaces such as ferrous iron and steel. Galvanized surfaces shall be primed with a manufacturer primer compatible with the finish coat.

Paint Standards Color Table

COLOR	NUMBER
Orange	12197
White	17875
Yellow	13538

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Note-

1. Federal specification T1-P-59, aviation surface paint, ready mixed, international orange.
2. Federal specification T1-102, aviation surface paint, oil titanium zinc.
3. Federal specification T1-102, aviation surface paint, oil, exterior, ready mixed, white and light tints.

122. AVAILABILITY OF SPECIFICATIONS

Federal specifications describing the technical characteristics of various paints and their application techniques may be obtained from:

GSA- Specification Branch
470 L'Enfant Plaza
Suite 8214
Washington, DC 20407
Telephone: (202) 619-8925

123. LIGHTS AND ASSOCIATED EQUIPMENT

The lighting equipment referred to in this publication should conform to the latest edition of one of the following specifications, as applicable:

a. Obstruction Lighting Equipment.

1. AC 150/5345-43, FAA Specification for Obstruction Lighting Equipment.
2. Military Specifications MIL-L-6273, Light, Navigational, Beacon, Obstacle or Code, Type G-1.
3. Military Specifications MIL-L-7830, Light Assembly, Markers, Aircraft Obstruction.

b. Certified Equipment.

1. AC 150/5345-53, Airport Lighting Certification Program, lists the manufacturers that have demonstrated compliance with the specification requirements of AC 150/5345-43.

2. Other manufacturers' equipment may be used provided that equipment meets the specification requirements of AC 150/5345-43.

c. Airport Lighting Installation and Maintenance.

1. AC 150/5340-21, Airport Miscellaneous Lighting Visual Aids, provides guidance for the installation, maintenance, testing, and inspection of obstruction lighting for airport visual aids such as airport beacons, wind cones, etc.
2. AC 150/5340-26, Maintenance of Airport Visual Aid Facilities, provides guidance on the maintenance of airport visual aid facilities.

d. Vehicles.

1. AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport, contains provisions for marking vehicles principally used on airports.

2. FAA Facilities. Obstruction marking for FAA facilities shall conform to FAA Drawing Number D-5480, referenced in FAA Standard FAA-STD-003, Paint Systems for Structures.

124. AVAILABILITY

The standards and specifications listed above may be obtained free of charge from the below-indicated office:

a. Military Specifications:

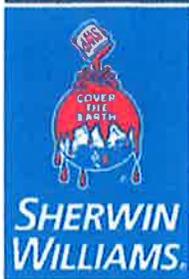
Standardization Document Order Desk
700 Robbins Avenue
Building #4, Section D
Philadelphia, PA 19111-5094

b. FAA Specifications:

Manager, ASD-110
Department of Transportation
Document Control Center
Martin Marietta/Air Traffic Systems
475 School St., SW.
Washington, DC 20024
Telephone: (202) 646-2047
FAA Contractors Only

c. FAA Advisory Circulars:

Department of Transportation
TASC
Subsequent Distribution Office, SVC-121.23
Ardmore East Business Center
3341 Q 75th Avenue
Landover, MD 20785
Telephone: (301) 322-4961



Protective & Marine Coatings

SHER-CRYL™ HPA HIGH PERFORMANCE ACRYLIC

B66-300 SERIES
B66-350 SERIES

Gloss
SEMI-GLOSS

Revised: May 20, 2014

PRODUCT INFORMATION

1.26

PRODUCT DESCRIPTION

SHER-CRYL HPA is a new technology, ambient cured, one component acrylic coating with superior exterior performance properties. Provides performance comparable to high performance solvent based coatings such as urethanes and epoxies.

- Chemical resistant
- Superior color and gloss retention
- Outstanding early moisture resistance
- Flash rust/early rust resistant
- Low odor, low VOC
- Corrosion resistant
- Fast dry
- Outstanding application characteristics

PRODUCT CHARACTERISTICS

Finish:	High Gloss or Semi-Gloss
Color:	Wide range of colors available
Volume Solids:	38.5% ± 2%, Ultra White
Weight Solids:	51% ± 2%, Ultra White
VOC (EPA Method 24):	<200 g/L; 1.66 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	6.0 (150)	10.0 (250)
Dry mils (microns)	2.5 (63)	4.0 (100)
~Coverage sq ft/gal (m ² /L)	154 (3.8)	247 (6.0)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	616 (15.1)	

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

Drying Schedule @ 7.0 mils wet (175 microns):

	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 120°F/49°C
To touch:	1 hour	30 minutes	5 minutes
To handle:	8 hours	5 hours	15 minutes
To recoat:	8 hours	5 hours	15 minutes
To cure:	30 days	30 days	30 days

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

Shelf Life:	36 months, unopened Store indoors at 50°F (10°C) to 100°F (38°C)
Flash Point:	>230°F (110°C) PMCC, mixed
Reducer:	Water R8K10 - WB Hot Weather Reducer up to 10%
Clean Up:	Water

RECOMMENDED USES

For use over prepared:

- Steel
- Aluminum
- Zinc rich primers
- Galvanizing
- Concrete
- Wood
- Masonry

Examples:

- Buildings
- Machinery
- Power plants
- Select Marine Structures
- Storage Tanks
- Equipment
- Piping
- Water treatment plants
- New Construction
- Structural Steel

- Suitable for use in USDA inspected facilities
- Can be used as a dryfall coating under certain environmental conditions (see Application Bulletin)
- Conforms to AWWA D102 OCS #3
- Acceptable for use in high performance architectural applications
- Acceptable for interior use / drywall
- Conforms to MPI #'s 154 & 164 (Gloss); 141, 153, & 163 (Semi-Gloss)
- Complies with performance criteria of SSPC Paint 24.
- FIRETEX Hydrocarbon Coatings

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10

System Tested*:

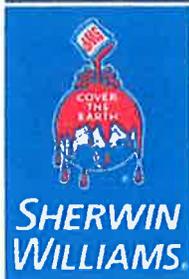
2 cts. Sher-Cryl HPA @ 3.0 mils (75 microns) dft/ct
*unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D4541	946 psi
Corrosion Weathering ¹	ASTM D5894, 10 cycles, 3,360 hours	Rating 9 per ASTM D610 for rusting ; Rating 10 per ASTM D714 for blistering
Direct Impact Resistance	ASTM D2794	>100 in. lbs.
Dry Heat Resistance	ASTM D2485	300°F (149°C)
Exterior Durability	3 years, 45° South	Excellent
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Humidity Resistance ¹	ASTM D4585, 1,250 hours	Rating 9 per ASTM D1654 for corrosion ; Rating 10 per ASTM D714 for blistering
Pencil Hardness	ASTM D3363	2B
Salt Fog Resistance ¹	ASTM B117, 1,250 hours	Rating 9 per ASTM D1654 for corrosion ; Rating 10 per ASTM D714 for blistering
Thermal Cycling	ASTM D2246, 10 cycles	Passes

Footnote:

¹ 1 ct. Sher-Cryl HPA over 1 ct. Pro-Cryl Universal Primer

Provides performance comparable to products formulated to federal specification: AA50570, and Paint Specification: SSPC-Paint 23 and 24.



Protective & Marine Coatings

SHER-CRYL™ HPA HIGH PERFORMANCE ACRYLIC

B66-300 SERIES
B66-350 SERIES

GLOSS
SEMI-GLOSS

Revised: May 20, 2014

PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct.	
		Mils	(Microns)
Steel:			
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Steel:			
1 ct.	Pro-Cryl Universal Primer	2.0-4.0	(50-100)
1-2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Steel:			
1 ct.	DTM Acrylic Primer/Finish	2.5-5.0	(63-125)
or	Kem Bond HS	2.0-5.0	(50-125)
or	Zinc Clad Primer	3.0-5.0	(75-125)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Steel:			
1 ct.	Zinc Clad XI	3.0-4.0	(75-100)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Aluminum:			
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Aluminum:			
1 ct.	DTM Wash Primer	0.7-1.3	(18-32)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Galvanizing:			
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Concrete Block:			
1 ct.	Heavy Duty Block Filler	10.0-18.0	(250-450)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Concrete/Masonry:			
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Prefinished Siding: (Baked-on finishes)			
1 ct.	DTM Bonding Primer	2.0-5.0	(50-125)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Wood, exterior:			
1 ct.	A-100 Exterior Oil Wood Primer	1.5	(38)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Wood, interior:			
1 ct.	Premium Wall & Wood Primer	1.8	(45)
2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)

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

DISCLAIMER

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SURFACE PREPARATION

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

Do not use hydrocarbon solvents for cleaning.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

- Iron & Steel: SSPC-SP2
- Aluminum: SSPC-SP1
- Galvanizing: SSPC-SP1
- Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3
- * Wood: Dry and sanded smooth
- * Prefinished Siding: SSPC-SP1
- * Requires primer

Surface Preparation Standards

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

TINTING

Tint with EnviroToner colorants at 100% strength. Do not use BAC.

Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material)
At least 5°F (2.8°C) above dew point
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight: 10.30 ± 0.2 lb/gal 1.24 Kg/L

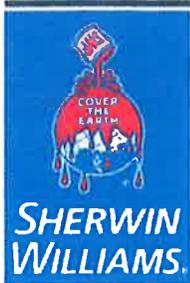
SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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

WARRANTY

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



Protective & Marine Coatings

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B66-300 SERIES
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GLOSS
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Revised: May 20, 2014

APPLICATION BULLETIN

1.26

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

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

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	6.0 (150)	10.0 (250)
Dry mils (microns)	2.5 (63)	4.0 (100)
~Coverage sq ft/gal (m ² /L)	154 (3.8)	247 (6.0)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	616 (15.1)	

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

Drying Schedule @ 7.0 mils wet (175 microns):

	@ 50°F/10°C	@ 77°F/25°C 50% RH	@ 120°F/49°C
To touch:	1 hour	30 minutes	5 minutes
To handle:	8 hours	5 hours	15 minutes
To recoat:	8 hours	5 hours	15 minutes
To cure:	30 days	30 days	30 days

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

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

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

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PERFORMANCE TIPS

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

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

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

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

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

Application temperature above 95°F (35°C) may cause dry spray, uneven sheen, and poor adhesion.

Application temperature below 50°F (10°C) may cause poor adhesion and lengthen the drying and curing time.

Sher-Cryl Acrylic is extremely sensitive to hydrocarbon containing solvents. When cleaning the surface per SSPC-SP1, use only an emulsifying industrial detergent, followed by a water rinse. Do not use hydrocarbon containing solvents.

Do not use hydrocarbon solvents for cleaning.

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

Sher-Cryl can be used as a dryfall coating in certain environmental conditions. Test product before each application. Test by spraying 15-25 feet toward paint container. All material should readily wipe clean. Temperature and humidity will affect ability to dryfall. Hot surface will cause overspray to bond to surface. Always clean overspray immediately from hot surfaces.

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

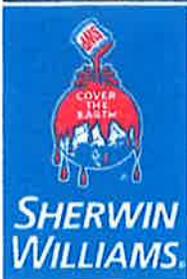
SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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

WARRANTY

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



Protective & Marine Coatings

SHER-CRYL™ HPA HIGH PERFORMANCE ACRYLIC

B66-300 SERIES
B66-350 SERIES

GLOSS
SEMI-GLOSS

Revised: May 20, 2014

APPLICATION BULLETIN

1.26

SURFACE PREPARATIONS

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

Do not use hydrocarbon solvents for cleaning.

Iron & Steel

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6. Primer recommended for best performance.

Aluminum

Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1.

Galvanizing

The surface should be weathered for 6 months prior to painting. Remove all oil and grease per SSPC-SP1. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2. Prime area the same day as cleaned with Pro-Cryl.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly cleaned and dry. Surface temperatures must be at least 55°F (13°C) before filling. If required for a smoother finish, use Heavy Duty Block Filler, B42W46. Filler must be thoroughly dry before topcoating per manufacturer's recommendations.

Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.

Wood

Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Pre-Finished Siding

Remove oil, grease, dirt, oxides, and other contaminants from the surface by cleaning per SSPC-SP1 or water blasting per NACE Standard RP-01-72. Always check for compatibility of the previously painted surface with the new coating by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion. DTM Bonding Primer is required.

Previously Painted Surfaces

If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal	Sa 3	Sa 3	SSPC SP 5	1
Near White Metal	Sa 2.5	Sa 2.5	SSPC SP 6	10
Commercial Blast	Sa 2	Sa 2	SSPC SP 7	2
Brush-Off Blast	Sa 1	Sa 1	SSPC SP 8	3
Hand Tool Cleaning	St 2	St 2	SSPC SP 9	4
Rusted	St 3	St 3	SSPC SP 10	5
Pitted & Rusted	St 3	St 3	SSPC SP 11	6
Power Tool Cleaning	St 3	St 3	SSPC SP 12	7
Rusted	St 3	St 3	SSPC SP 13	8
Pitted & Rusted	St 3	St 3	SSPC SP 14	9

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

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

Reducer Water
R8K10 - WB Hot Weather Reducer
up to 10%

Clean Up Water

Airless Spray

Pressure..... 1500 psi
Hose..... 1/4" ID
Tip..... .017" - .021"
Filter..... 60 mesh
Reduction..... Not recommended

Conventional Spray

Gun Binks 95
Fluid Nozzle 66
Air Nozzle..... 63PB
Atomization Pressure..... 50 psi
Fluid Pressure..... 15-20 psi
Reduction..... As needed up to 12½% by volume

Brush

Brush..... Nylon / polyester
Reduction..... Not recommended

Roller

Cover 3/8" woven solvent resistant core
Reduction..... Not recommended

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



PRO INDUSTRIAL™

113.05

PRO-CRYL® UNIVERSAL PRIMER B66-310 SERIES

As of 02/01/2014, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® 09 S	Yes
MPI#	Yes	NGBS	Yes

CHARACTERISTICS

Pro Industrial Pro-Cryl Universal Primer is an advanced technology, self cross-linking acrylic primer. It is rust inhibitive and designed for both construction and maintenance applications. It can be used as a primer under water-based or solvent-based high performance topcoats.

- Rust inhibitive
- Single component
- Early moisture resistant
- Fast dry
- Low temperature application 40°F
- Interior and exterior use
- Suitable for use in USDA inspected facilities

Color: Off White, Gray, Red Oxide

Recommended Spread Rate per coat:

Wet mils:	5.0 - 10.0
Dry mils:	2.0 - 4.0
~Coverage:	156 - 312 sq ft/gal approximate

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

Drying Time @ 6.0 mils wet 50% RH:

	40°F	77°F	120°F
To touch:	2 hrs	40 min	20 min
Tack free:	8 hrs	2 hrs	1 hr
To recoat:	16 hrs	4 hrs	2 hrs
To cure:	45 days	30 days	14 days

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

Finish: Low sheen

Flash Point: N/A

Shelf Life: 36 months, unopened
Store indoors at 40°F to 100°F.

Tinting: Do not tint
B66W310 (may vary by color)

VOC (less exempt solvents):
96 g/L; 0.80 lb/gal

As per 40 CFR 59.406 and SOR/2009-264, s.12

Volume Solids: 36% ± 2%

Weight Solids: 49% ± 2%

Weight per Gallon: 10.2 lb

RECOMMENDED SYSTEMS

Waterborne topcoat:

- 1-2 cts. Pro Industrial High Performance Acrylic
- or Pro Industrial Waterborne Catalyzed Epoxy
- or Pro Industrial Multi-Surface Acrylic
- or Pro Industrial Hi-Bild Waterbased Epoxy
- or Pro Industrial Pre-Catalyzed Epoxy

Solvent borne topcoat:

- 1-2 cts. Pro Industrial High Performance Epoxy
- or Pro Industrial Urethane Alkyd

Pro Industrial Pro-Cryl Universal Primer B66W310 Off White is GREENGUARD GOLD certified for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg.

System Tested: (unless otherwise indicated)

Substrate:	Steel
Surface Preparation:	SSPC-SP10
1 ct.	Pro Industrial Pro-Cryl Universal Primer
1 ct.	Pro Industrial High Performance Acrylic

Adhesion:

Method: ASTM D4541
Result: 500 psi

Result: Passes

Moisture Condensation Resistance:

Method: ASTM D4585, 100°F, 1250 hours

Result: Passes

Corrosion Weathering:

Method: ASTM D5894, 10 cycles,
3360 hours
Result: Passes

Pencil Hardness:

Method: ASTM D3363
Result: H

Direct Impact Resistance:

Method: ASTM D2794
Result: >140 in. lbs.

Salt Fog Resistance:

Method: ASTM B117, 1250 hours
Result: Passes

Dry Heat Resistance*:

Method: ASTM D2485
Result: 200°F

Provides performance comparable to products formulated to federal specification: AA50557 and Paint Specification: SSPC-Paint 23.

Flexibility:

Method: ASTM D522, 180° bend,
1/4" mandrel

*Suitable for intermittent dry heat resistance up to 300°F when used as a system with Sher-Cryl HPA

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Do not use hydrocarbon solvents for cleaning.

Iron and Steel - Minimum surface preparation is Hand Tool Cleaning per SSPC-SP2. Remove all oil and grease from the surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6.

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1.

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

Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

APPLICATION

Refer to the MSDS before using

Temperature: 40°F minimum
 120°F maximum
 (air, surface, and material)
 At least 5°F above dew point
Relative humidity: 85% maximum

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

Reducer: Water

Airless Spray

Pressure2000 psi
Hose 1/4" ID
Tip015" - .019"
Filter 60 mesh
ReductionNot recommended

Conventional Spray

Gun Binks 95
Fluid Nozzle..... 66
Air Nozzle 63PB
Atomization Pressure60 psi
Fluid Pressure25 psi
ReductionAs needed up to 5% by volume

Brush Nylon/Polyester
ReductionNot recommended

Roller3/8" woven
ReductionAs needed up to 5% by volume

If specific application equipment is listed above, equivalent equipment may be substituted.

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

HOTW 02/17/2014 B66W310 32 96

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