

RD-COATINGS RD-ELASTOMETAL SPECIFICATON

PART 1 - GENERAL

1.01 **SUMMARY**

- A. This Section includes surface preparation and field painting of the following:

The work shall consist of the surface cleaning, priming and painting of steel structures.

1.02 **SUBMITTALS**

- A. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference the specific coating, finish system, and application.
- B. Manufacturer's Information: Provide manufacturer's technical information, including instructions for handling, storing, and applying each coating material proposed for use.
- C. Certification: Provide information that the manufacturer's products supplied for this project comply with specified VOC product content and local regulations controlling use of volatile organic compounds.
- D. Samples for Initial Selection: Provided color charts showing the full range of colors available for each type of finish-coat material indicated.
- E. Samples for Verification: Provide stepped Samples, defining each separate coat, Use representative colors when preparing a job site mock-up for review. Resubmit until required sheen, color, and texture is achieved.
- F. Qualification Data: For firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

1.03 **QUALITY ASSURANCE**

- A. The Contractor shall give the Architect/Engineer and coatings manufacturer a minimum of three days advance notice of the start of any field surface preparation work or coating application work.
- B. Contractor Qualification: The contractor must provide detailed background information demonstrating their capabilities and experience with projects of similar size and scope. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- C. Equipment: All equipment for application of the coating and the completion of the work shall be furnished by the Contractor in first-class condition and shall comply with recommendations of the coating manufacturer. The Contractor must use hoses for the airless spray equipment that are dedicated to spraying water-based paint.

1.04 **SERVICES OF MANUFACTURER'S REPRESENTATIVE**

- A. The Contractor shall purchase coatings from the accepted manufacturer. The manufacturer shall assign a local representative to periodically observe the application of the product. The Contractor shall submit a detailed report to the Owner at the completion of his work identifying the products used and verifying that said products were applied in accordance with the written specification.

1.05 **SAFETY AND HEALTH REQUIREMENTS**

- A. In accordance with requirements of OSHA Safety and Health Standards for Construction (29 CFR 1926) and the applicable requirements of regulatory agencies having jurisdiction, as well as manufacturer's printed instructions, technical bulletins, manuals, and material safety data sheets, the Contractor shall provide and require use of personal protective and safety equipment for persons working in or about the project site.

1.06 **DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials to the Project Site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:

1. Product name and Product MSDS sheets.
2. Product description (generic classification or binder type).
3. Manufacturer's stock number.
4. Thinning instructions.
5. Application instructions.
6. Color name and number.
7. VOC content.

- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45° F (7° C). Maintain containers in use in storage in a clean condition, free of foreign materials and residue.

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.

1.07 **PROJECT CONDITIONS**

- A. Apply water-based paints only when the air temperature is 45° F min. and rising for 24 hours.
- B. Do not apply water-based paint in snow, rain, fog, or mist; or at temperatures less than 5° F (3° C) above the dew point; or to damp or wet surfaces.
- C. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

1.08 **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.

B. Quantity: Furnish the Owner with extra paint materials in the quantities indicated below:

1. Water-Borne Coating, Top Coat: 1 unit (20 kg) of the final color applied.

PART 2 - PRODUCTS

2.01 **MATERIAL**

- A. All coating materials shall be equal to those manufactured by **RD-Coatings**, Assesse, Belgium and distributed nationally by **Righter RD Coatings, USA**, Stratford, CT
- B. Spot primer and first and second coat: Rust-preventing acrylic polymer coating shall be **RD-Elastometal** as manufactured by **RD Coatings**. The coating shall be a one part, acrylic, water borne, rust-preventing, self-priming coating which can be applied either by brush, roller or airless spray equipment. The coating shall be dry fall. The coating shall form a seamless rubber anti-rust and waterproof membrane. The coating shall not break down from exposure to long-term weathering or ultra-violet radiation. Volatile organic compounds shall be 8 g/l. A one-millimeter thickness of the coating applied on an elastic rubber plate or band shall stand an extension of 200% without showing cracks or tears. **RD-Elastometal** is 67% solids by weight; 57% solids by volume.

PART 3 - EXECUTION

3.01 **SURFACE PREPARATION**

- A. General: Surfaces to be coated shall be cleaned as required by the coating manufacturer to properly receive prime and finish coats. No surface preparation method shall be used unless acceptable to the coating manufacturer and the Engineer.
- B. Pressure Washing: Pressure Wash all surfaces to be coated using a minimum of 4,000 psi to remove accumulated dirt, loose rust and loosely adhered existing paint. The pressure washer shall be fitted with a 0° spinner tip and the steel surfaces cleaned at a distance of 6" to 8" from the surface of the steel and the pressure washer held at a perpendicular angle to the surface being washed. In most cases all paint that remains after pressure washing can be over coated.
- C. Power Tool Cleaning: All areas of exposed layered rusted metal shall be power tool cleaned in accordance with SSPC-SP-3, or in difficult and otherwise inaccessible areas by hand tool cleaning in accordance with SSPC-SP-2. Remove any lifted paint left from the pressure washing so the edges of all existing paint are tight. The results of cleaning by this method shall be a clean smooth surface of tightly adhering coating and bare steel with a "tight rust profile".
- D. After power tool cleaning, rinse the steel surfaces to remove any dust on the surface. Test for chloride contamination, remove and reclean if identified.

3.02 **MATERIALS PREPARATION**

- A. Materials Preparation: Mix and prepare paint materials according to manufacturers written instructions.
- B. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.

- C. 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.
- D. Use only thinners approved by paint manufacturer and only within recommended limits.

3.03 COATING APPLICATION

- A. Minimum surface and atmospheric conditions:

All steel surfaces must be completely dry. If the surfaces have picked up atmospheric pollutants, dust or airborne contaminants since the steel was pressure washed, it may be necessary to rinse the surface prior to coating application.

Temperature must be 45° F. and rising for application to proceed and the temperature must remain above 45° F for 24 hours when daily high temperatures are in the 50's. At higher temperatures 2 coats can be applied on the same day as long as temperatures above 45 ° F can be expected continuously for 72 hours. The surface temperature of the steel must be between 44 and 110° F. If the relative humidity is above 85% and there is no air movement, consult the Manufacturer's representative before proceeding with any coating application.

- B. Coatings shall be applied without runs, sags, thin spots, pinholes or unacceptable marks. Coatings shall be applied at the rate specified by the coating manufacturer to achieve the minimum dry mil thickness required. Additional coats shall be applied, if necessary, to obtain thickness specified.
- C. Coatings shall be applied with spraying equipment only. Where thinning is necessary, only the products of the particular manufacturer furnishing the coatings shall be used; and all such thinning shall be done in strict accordance with the manufacturer's instructions, as well as with the full knowledge of the Architect/Engineer.
- D. Inspection between coats: the coating Inspector shall inspect each field coat of prime and finish before the succeeding coat is applied. The Contractor shall follow a system of using different colors so that no two coats on a given surface are exactly the same color. Magnetic dry film thickness gages and wet film thickness gages will be utilized for quality control.
- E. Special areas: Special attention shall be given to insure that edges, corners, crevices, welds and fasteners receive a film thickness equivalent to that of the adjacent coated surfaces.
- F. Coating Sequence: The following coating sequence must be followed in the application of the coating specified.
 1. Apply a detail coat of **RD-Elastometal** by brush or roller to all areas of rusted steel and to all joints, fasteners, rivet heads and edges of plate connections. Pay particular attention to force the coating into the interface edges where the existing paint remains next to bare steel. Detail hard to reach areas that spray painting will not completely cover. Color red, applied 5 mils DFT. Apply a detail coat by brush or roller to any areas of bare steel, damaged coating and scratches. Color red, applied at 5 mils DFT.
 2. Apply an Intermediate coat of **RD-Elastometal** by airless spray to all surfaces of the steel, in a contrasting color, applied 7 mils DFT.

3. Apply a finish coat of **RD-Elastometal** by airless spray to all surfaces of the steel, in a color selected by the owner, applied 7 mils DFT.

G. Completed Work: Match approved samples for color and coverage. Remove, refinish, or repaint work not complying with requirements.

3.04 **QUALITY WORKMANSHIP**

A. The Contractor shall be responsible for the cleanliness of his coating operations and shall use covers and masking tape to protect the new and existing material not intended to be coated whenever such covering is necessary, or if so requested by the Owner. Any coatings identified for removal shall be carefully removed without damage to any finished coatings or surface. If damage does occur, the entire surface, adjacent to and including the damaged area shall be recoated without visible lap marks and without additional cost to the Owner.

B. Coatings found defective shall be removed and recoated as required by the Engineer. Before final acceptance of the Work, damaged surfaces shall be cleaned and recoated as directed by the Engineer.

3.05 **CLEANING**

A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

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.

3.06 **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 the 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.

3.07 **GUARANTEE**

A. During the first year of the guarantee it is the Contractors responsibility to repair or replace any area of the application that experiences any chalking, peeling or rust due to faulty preparation and materials application.

Specifier Notes: This product selection guide is written according to the Construction Specifications Institute (CSI) Format, including *Master Format*, *Section Format*, and *Page Format*, contained in the *CSI Manual of Practice*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the drawings.

Delete all "Specifier Notes" when editing this section.

Specifier Notes: This section covers RD-Coatings high-performance coating systems for commercial facilities

This specification is only a guide listing various coating system options for various environments and should not be used as a final specification. Additional coating systems not listed in this specification are available, and may be more appropriate for your coating application. To finalize this specification, please contact www.rdcoatingsusa.com

Many coatings contain organic solvents. Consult RD Coatings, USA for compliance to local VOC regulations.

RD Coatings, USA
167 Avon Street
Stratford, CT 06615
Phone: (917) 747-7044 Fax: (203) 380-9488

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