

# **RD COATINGS -RD-ELASTOFLEX ELASTOMERIC ACRYLIC WALL COATING SPECIFICATION**

## **PART 1 - GENERAL**

### **1.01 RELATED DOCUMENTS**

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

### **1.02 SUMMARY**

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

1. The work shall consist of surface cleaning, concrete/masonry patching, crack and joint repair and the application breathable, elastic, UV resistant, waterproof acrylic coating for exterior walls.

### **1.03 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. Identify each material by manufacturer's general classification.
- B. **Manufactures Information:** Provide manufacturer's technical information, including instructions for handling, storing, and applying each coating material proposed for use.
- C. **Samples for Initial Selection:** Provide color charts showing the full range of colors available for each type of finish-coat material indicated.
- D. **Samples for Verification:** Provide stepped samples, defining each separate coat. Use representative colors when preparing a job site mock-up for review. Reapply until required sheen, color and texture are achieved.

### **1.04 QUALITY ASSURANCE**

- A. The Contractor shall give the Architect/Engineer and coating Manufacturer a minimum of three days advance notice of the start of any field surface preparation work or coating application work.
- B. All work on surface preparation and coating application shall be performed in the presence of the Architect/Engineer or his designated representative, unless the Architect has specifically allowed the performance of such work in his absence.
- C. Only applicators trained in the application of the specified products will be allowed to work on the project.
- D. **Equipment:** All equipment for application of the coating and shall be furnished by the Contractor in first-class condition and shall comply with recommendations of the coating manufacturer.

### **1.05 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.

### **1.06 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.
  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 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 coatings only when the air temperature is 45°F and rising.
- B. Do not apply water-based paint in snow, rain, fog, or mist; or at a temperature 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.

## PART 2 - PRODUCTS

### 2.01 MATERIAL

- A. All coating materials shall be equal to those manufactured by RD Coatings, Assesse, Belgium and distributed by RD Coatings USA, Stratford, CT. Products of other manufacturers, comparable in quality and type of those specified will be considered. Product data must be provided, substantiated by certified tests that prove that the substituted material is equal in performance to the coating material specified. Also, the manufacturer must provide in writing, satisfactory proof of past performance of similar applications. All information for substitute products must be included in the contractors bid package at the time of bid. Only products, which were submitted as part of the original bid, will be considered. The written acceptance by the Architect/ Engineer must be obtained before the Contractor uses any such alternative products.
- B. Masonry Patching: Acrylic- one part RD-E Deck Filler or similar single package Portland Cement, non-shrink patching material.
- C. Caulking: One part, waterborne, re-coatable acrylic dispersion, RD-Acrykit as manufactured by RD Coatings.
- D. Primer: Acrylic impregnating water borne primer shall be RD-Unifix primer as manufactured by RD Coatings The coating shall be a one part, acrylic, water borne, self-priming coating which can be applied either by brush or roller. Volatile organic compounds shall be 0% per gallon. RD-Unifix primer is 15% solids and must be used undiluted.
- E. Base Coat: Acrylic Polymer coating shall be RD-Elastoflex as manufactured by RD-Coatings. RD-Elastoflex is 71% solids by weight and 58% solids by volume. Volatile organic compounds shall be 45 g/l.
- F. Texture Coat: Acrylic Polymer coating shall be RD-Elastoflex Quartz as manufactured by RD-Coatings. RD-Elastoflex Quartz is 75% solids by weight and 60% solids by volume. Volatile organic compounds shall be 45 g/l.
- G. Finish Coat: Acrylic polymer coating shall be RD-Elastoflex as manufactured by RD Coatings. RD-Elastoflex is 71% solids by weight; 58% solids by volume. Volatile organic compounds shall be 45 g/l. All above products shall be a one part, acrylic, thixotropic liquid, which can be applied either by brush, roller or airless spray equipment. The coating System shall form a seamless rubber waterproof membrane that can bridge small active cracks at cold temperatures, is unaffected by long-term weathering or ultraviolet light. The coating shall be breathable for water vapor but will reduce the diffusion of CO<sub>2</sub>.

- H. Accessory materials: RD-Elastometal is a rust inhibitive coating to be used on exposed metals such as reinforcing bars etc. Volatile organic compounds shall be 8 g/l. RD-Reinforcing Fleece to be used locally over active joints, cracks, and concrete patches or as part of a full mesh reinforced system.

## 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 Architect/Engineer.
- B. Pressure Washing: All the surfaces of the existing walls shall be pressure washed at a pressure of 4,000 psi to remove all dirt, contamination, loose concrete, old unsound coatings and cementitious patch material not removed by power tools. The pressure washer shall be fitted with a 0° Spinner Tip and held at 6”- 12” from the surface, while staying perpendicular to the surface. Depending on the substrate, such as certain brick, soft stone etc., the pressure may have to be decreased or the 0° tip replaced with a fan tip. This will be determined during preparation of the Mock-up sample area.
- C. Hand and Power Tools: As necessary to remove all areas of unsound concrete and mortar splatter.

### 3.02 MATERIALS PREPARATION

- A. Materials Preparation: Mix and prepare coating materials according to manufacturer's written instructions.
- B. Maintain containers used in mixing and applying coating 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 surfaces must be completely dry. If the surfaces have picked up atmospheric pollutants, dust or airborne contaminants since the masonry was pressure washed, or at any other time during the project, it may be necessary to rinse the surface prior to applying the next coating. Temperature must be 45° F. and rising for 24 hours. If the relative humidity is above 85% consult the Manufacturer's Representative before proceeding with any coating application.
- B. Mock-up: The contractor must apply the specified system to a 10’x10’ area and have it approved by the Architect/Engineer
- C. 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 thicknesses specified.
- D. Coatings shall be applied either by roller, brush or spray in strict accordance with the Manufacturer’s instructions, as well as with the full knowledge of the Architect/Engineer.
- E. The Contractor shall follow a system of using different colors so that no two coats on a given surface are exactly the same color. Wet film thickness gages will be utilized for quality control.
- F. Special areas: Special attention shall be given to ensure that edges, corners and crevices receive a film thickness equivalent to that of the adjacent coated surfaces.
- G. Masonry Patching: RD-E Deck Filler or similar cementitious patching material.
- H. Elastomeric Acrylic Wall Coating Sequence: The following coating sequence must be followed in the application of the coating specified. Change colors for each coat.

**OPTION A: Thin Film Elastomeric Acrylic System (Local Reinforcement if needed):**

1. Prime all concrete surfaces with RD-Elastoflex thinned 10% with water (at 2-3mils DFT) or RD-Unifix(to wet the surface). Use a 1/2" nap roller and saturate the surface, the spread rate is approximately 1200 sf / 5-gallon unit on a semi-smooth surface.
2. All cracks over 1/16" must be filled and sealed with RD-Acrykit.
3. After the primer has dried, apply RD-Elastoflex at a thickness of 3 mils DFT. The spread rate is approximately 1,200 sf / 5-gallon unit on a semi-smooth surface.
4. Apply the finish coat of RD-Elastoflex using a 1/2" nap roller, brushes or airless spray, at a thickness of 6 mils DFT. The spread rate is approximately 1,200 sf / 5-gallon unit on semi-smooth surface.

**Note:** RD-Elastometal is a rust inhibitive coating to be used on exposed metals such as reinforcing bars etc. RD-Reinforcing Fleece to be used locally over active joints, cracks, and concrete patches or as part of a full mesh reinforced system

**OPTION B: Elastomeric Acrylic System (Local Reinforcement if needed):**

1. Prime all concrete surfaces with RD-Elastoflex thinned 10% with water (at 2-3mils DFT) or RD-Unifix (to wet the surface). Use a 1/2" nap roller and saturate the surface, the spread rate is approximately 1,200 sf / 5-gallon unit on a semi-smooth surface.
2. All cracks over 1/16" must be filled and sealed with RD-Acrykit.
3. After the primer has dried, apply RD-Elastoflex at a thickness of 6 mils DFT. The spread rate is approximately 600 sf / 5-gallon unit on a semi-smooth surface.
4. Apply the finish coat of RD-Elastoflex using a 1/2" nap roller, brushes or airless spray, at a thickness of 6 mils DFT. The spread rate is approximately 600 sf / 5-gallon unit on semi-smooth surface.

**Note:** RD-Elastometal is a rust inhibitive coating to be used on exposed metals such as reinforcing bars etc. RD-Reinforcing Fleece to be used locally over active joints, cracks, and concrete patches or as part of a full mesh reinforced system

**OPTION C: Elastomeric Acrylic System with FULL mesh Reinforcement:**

1. Prime all concrete surfaces with RD-Elastoflex thinned 10% with water (at 2-3mils DFT) or RD-Unifix(to wet the surface). Use a 1/2" nap roller and saturate the surface, the spread rate is approximately 1200 sf / 5-gallon unit on a semi-smooth surface.
2. All cracks over 1/16" must be filled and sealed with RD-Acrykit.
3. After the primer has dried, apply RD-Elastoflex with RD-Reinforcing Fleece over all surfaces at a thickness of 6 mils DFT, overlapping seams by 2" minimum. The spread rate is approximately 600 sf / 5-gallon unit on a semi-smooth surface.
4. Apply the finish coat of RD-Elastoflex using a 1/2" to 3/4" nap roller, brushes or airless spray, at a thickness of 8-10 mils DFT. The spread rate is approximately 600 sf / 5-gallon unit on a semi-smooth surface.

**Note:** RD-Elastometal is a rust inhibitive coating to be used on exposed metals such as reinforcing bars etc.

**OPTION D: Elastomeric Acrylic Stucco Textured Finish (Local Reinforcement if needed):**

1. Prime all concrete surfaces with RD-Elastoflex thinned 10% with water (at 2-3mils DFT) or RD-Unifix(to wet the surface). Use a 1/2" nap roller and saturate the surface, the spread rate is approximately 1200 sf / 5-gallon unit on a semi-smooth surface.
2. All cracks over 1/16" must be filled and sealed with RD-Acrykit.
3. Apply the texture coat of RD-Elastoflex Quartz at a minimum thickness of 8 mils DFT, using a heavy nap roller or texture spay gun. Coverage rates vary greatly depending on desired texture.

Apply a mock-up to approve desired texture and verify coverage. Allow RD-Elastoflex Quartz to dry overnight.

4. Apply the finish coat of RD-Elastoflex using a 1/2" nap roller, brushes or airless spray, at a thickness of 6 mils DFT. The spread rate is approximately 600 sf / 5-gallon unit on a semi-smooth surface.

**Note:** RD-Elastometal is a rust inhibitive coating to be used on exposed metals such as reinforcing bars etc. RD-Reinforcing Fleece to be used locally over active joints, cracks, and concrete patches or as part of a full mesh reinforced system

#### **OPTION E: Elastomeric Acrylic Stucco Textured Finish with Full Mesh Reinforcement:**

1. Prime all concrete surfaces with RD-Elastoflex thinned 10% with water (at 2-3mils DFT) or RD-Unifix(to wet the surface). Use a 1/2" nap roller and saturate the surface, the spread rate is approximately 1200 sf / 5-gallon unit on a semi-smooth surface.
2. All cracks over 1/16" must be filled and sealed with RD-Acrykit.
3. After the primer has dried, apply RD-Elastoflex with RD-Reinforcing Fleece over all surfaces at a thickness of 6 mils DFT, overlapping seams by 2" minimum. The spread rate is approximately 600 sf / 5-gallon unit on a semi-smooth surface.
4. Apply the Texture coat of RD-Elastoflex Quartz using a heavy nap roller or texture spay gun. Coverage rates vary greatly depending on desired texture. Apply a mock-up to approve desired texture and verify coverage. Allow RD-Elastoflex Quartz to dry overnight.
5. Apply the finish coat of RD-Elastoflex using a 1/2" nap roller, brushes or airless spray, at a thickness of 6 mils DFT. The spread rate is approximately 600 sf / 5-gallon unit on a semi-smooth surface.

**Note:** RD-Elastometal is a rust inhibitive coating to be used on exposed metals such as reinforcing bars etc.

- I. Completed Work: The completed system shall be uniform in color and texture. The RD-Reinforcing Fleece shall be completely hidden and the system pinhole free.

**Note to Specifier:** Depending on texture of surface, final texture of the finish, job conditions and other factors:

- RD-Elastoflex or RD-Elastoflex Quartz can be used to fill fine cracks and small air holes instead of RD-Acrykit.
- RD-Elastoflex, thinned with water at 15-20% can be used as a primer instead of RD-Unifix.

### 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. Clean up: 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 surface

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-Elastoflex 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](http://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: (203) 380-9477 Fax: (203) 380-9488

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