



LUCAS *Coatings & Mastics for the Roofing Trade*

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Guide Specification Section 07560 Lucas 637M

Thermoplastic Rubber Modified Aluminum Roof Coating System for Metal Roof Systems

Part 1—General

1.0 Summary

This specification is presented as a guide for coating and restoration of metal roof systems with the Lucas #637 Metal Roof Restoration System.

1.1 Scope of Work

Applicator will provide all labor, equipment and materials necessary to install the coating system. The manufacturer's most current Product Data Bulletins and installation instructions shall be observed in conjunction with this specification.

1.2 Submittals

- A. Submit Product Data Bulletins confirming physical and performance properties of the products.
- B. Submit Material Safety Data Sheets for all products to be used in the assembly.
- C. Submit a roof survey including measurements and descriptions of the condition of seams, penetrations, drains, gutters and known leaks. Photographs of all shall be included in the submission.
- D. Submit approved warranty terms and conditions.

1.3 Quality Assurance

- A. Supplier shall be R.M. Lucas Co. Chicago, IL or equivalent SBS modified aluminum coating with 3 lbs. of ASTM D 941 Aluminum paste and an EPA Energy Star Rating of .72 initial reflectivity, minimum, as is required by the Chicago Energy Code.
- B. Supplier shall retain batch samples of all materials used in the system for a minimum of ten years.
- C. Contractor must be an Approved Applicator for the system being installed.
- D. Contractor shall furnish all insurance, licenses, permits and certifications as required by local authorities and/or the property owner.
- E. Contractor shall insure that all work performed at the site shall be in accordance with National Roofing Contractor's Association (NRCA) Low Slope Roofing Manual's recommendations and all other pertinent guidelines issued by the NRCA in reference to other types of construction present at the job site.

1.4 General Conditions

- A. The roof must be free of areas of ponding water, ice, snow, rain or dew, oils, greases, particulate matter or other debris.
- B. Roof insulation must be dry and/or vented according to manufacturer's building specific instructions.
- C. The roof surface must be a minimum of 35°F to insure that frozen condensation is not present on the roof surface.

1.5 Materials

A. Coatings require mixing immediately prior to application. All containers shall be thoroughly mixed with a mechanical mixing device for a minimum of five minutes each. Coatings shall be mixed no more than four hours prior to use. Remixing is permitted as is necessary.

B. No products with a Flash Point below 100° F shall be permitted due to associated fire hazard.

C. Materials should be maintained at a minimum temperature of 50° F for 24 hours prior to application to in order to ensure the optimal application qualities.

Part 2—Products

2.0 Products

A. Lucas #115 Detergent Roof Primer, a biodegradable detergent wash primer suitable for cleaning and preparing roof systems.

B. Lucas #5500 Seam Sealer, a solvent-borne thermoplastic rubber based sealant.

C. Lucas #6500 Universal™ Flashing Cement, a solvent-borne thermoplastic rubber based flashing cement.

D. Tietex® T-325 Polyester reinforcing fabric.

E. Lucas #6000 Universal Thermoplastic Roof Coating, a solvent-borne thermoplastic rubber coating.

F. Lucas #637 Elastomeric Aluminum Roof Coating, an SBS modified asphalt-based aluminum pigmented roof coating.

G. Miscellaneous tools and equipment including 3/4 to 1 1/4” inch nap rollers with 6’ handles, 4” brushes, roofer’s trowels, scissors for cutting fabric, and a 1/2 inch power drill with mixing attachment.

H. Spray equipment (optional) Graco 733 or Graco 833 with 3/4 inch hose to 5/8 inch 25’ whip with mastic gun and 635 tip. In cold weather, attach one or more Graco Viscon in-line heaters in order to raise the material temperature to a minimum 70° F and maximum 130° F at the spray tip.

Part 3—Execution

3.0 Inspection

Prior to commencement of work, the roof shall be re-inspected and any conditions not included in the roof survey shall be added noted. All new information must be communicated to the manufacturer prior to starting work.

3.1 Conditions & Remedies

A. The roof assembly must be structurally sound and free of blisters, shrinkage, buckling, delaminating of plies or other serious defects. Any serious defects shall be remedied prior to installation of the coating system.

B. Drains must be installed as to allow positive drainage of the roof surface. No areas shall retain water more than 48 hours or at depths exceeding 1/4 inch at any time. Retained water may not cover more than 5% of the roof’s surface area.

C. Fasteners shall be inspected and tightened where loose. Replace as necessary according to original manufacturer or NRCA guidelines.

D. Curbs and penetrations must not interrupt the flow of water off of the roof. If defects are present install crickets to divert water around the penetrations.

E. Flashings shall be properly terminated according to NRCA guidelines. Defective terminations shall be remedied. Flashings that are shrunken, taught or tented shall be replaced prior to installation of the coating system.

3.2 Surface Preparation

A. Mechanically remove all loose coatings and/or patching material as is possible. Wire brush to remove any areas of scaly rust.

B. The roof surface shall be cleaned with Lucas #115 Detergent Roof Primer according to manufacturer's most current products Data Bulletin. Dilute the material with water at the rate of four parts water to one part #115. Apply to the roof with a mop, pump sprayer or other suitable low-pressure sprayer at the rate of one gallon per 100 square feet. Avoid contact with painted surfaces or vinyl siding. Allow wet contact with the roof surface for a minimum of 15 minutes. Power-wash clean with a minimum 2000 psi power washer or orbital scrubber.

C. Rinse the roof surface with clean water until no residue remains.

3.3 Seam, Fastener and Flashing Reinforcement

A. Seams shall be sealed with Lucas #5500 Seam Sealer applied at 1/8 inch thickness and extending a minimum of one inch to either side of the seam. Seams with cover tape, asphalt mastic, etc. must be sealed with Tietex T325 fabric. The overlap on both sides of the seam must be a minimum of three inches +/- 1/2 inch. All rolls are 324 feet long. Apply Lucas #6000 at 1.5 gallons per 100 square feet and immediately embed fabric. Dry brush the fabric smooth. Allow a minimum of one hour dry time. Apply an additional 1.5 gallons of #6000 on top of the fabric to fully encapsulate it. Allow 24 hours before top coating.

B. Fasteners shall be sealed with Lucas #5500 Seam Sealer. Fastener shall be completely covered by the sealant. One gallon will seal approximately 400 fasteners.

C. All field defects, flashing defects or previous repairs must be reinforced with Tietex® T-325 reinforcing fabric. Available widths for field reinforcement include 6 inch, 12 inch, 20 inch and 40 inch. All rolls are 324 feet long. Apply Lucas #6000 at 1.5 gallons per 100 square feet and immediately embed fabric. Dry brush the fabric smooth. Allow a minimum of one hour dry time. Apply an additional 1.5 gallons of #6000 on top of the fabric to fully encapsulate it. Allow 24 hours before top coating.

D. Penetrations that can not be sealed with reinforcing fabric due to their shape or location shall be reinforced with Lucas #6500 Universal™ Flashing Cement or #5500 Seam Sealer. Apply with a brush or trowel 1/8 inch thick to 1/4 inch thick and taper all edges. Allow 24 hours before top coating.

3.4 Coating Installation

A. Remove any contamination or debris that has accumulated on the roof after cleaning.

B. Apply one continuous application of Lucas #637 at the rate of 2 gallons per 100 square feet (32 Wet Mils).

3.5 Inspection

Inspect the roof for even and adequate coverage. Dry film thickness of the coating should be a minimum 20 mils. Dry film thickness of reinforced areas shall be a minimum of 40 mils. Areas of under-application shall receive an additional coat in order to meet the minimum film thickness requirements. Any fish mouths in reinforced areas shall be split, flattened and reinforced a second time.

Part 4—Warranties

4.0 Warranty

Applicable warranty forms must be completed and submitted to R.M. Lucas Co. prior to beginning the project. Issuance of warranty will be dependant upon completion of the project to the satisfaction of R.M. Lucas Co. and payment of any required warranty fees. Issuance of the warranty does not constitute a waiver of the limitations set forth in Sections 1.4 and 3.1 of this document or the conditions and limitations expressed on the warranty itself.

4.1 Five Year Material Warranty

Five year material warranties are available through R.M. Lucas Co. Approved Applicators only. This warranty covers Manufacturer's material defects only and does not include coverage of labor costs or defects resulting from workmanship.

4.2 Other Warranties.

Other warranty terms and conditions may be offered by R.M. Lucas Co. from time to time at R.M. Lucas Co. sole discretion dependant upon the type and conditions