



GLOBAL Encasement, Inc.

Installation Guide Specification For Preserving Hypalon® Roofs 07560 GEI – Hypalon®

I. GENERAL

1.01 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install spray applied elastomeric acrylic coating system as outlined in this specification to preserve and extend the service life of Hypalon® single-ply roofing and provide energy saving and life-cycle cost benefits.
- B. The manufacturer's application instructions for each product used are considered part of these specifications and should be followed at all times.

1.02 SUBMITTALS

- A. Submit product data sheets and literature verifying physical properties of materials.
- B. Submit material safety data sheets.

1.03 QUALITY ASSURANCE

- A. Supplier Qualifications: The GLOBAL Encasement System for Hypalon® roofs, as supplied by GLOBAL Encasement, Inc., is approved for use on the project.
- B. The product manufacturer shall have been in business for a minimum of twenty-one (21) years.
- C. Applicator Qualifications: The applicator shall be approved by GLOBAL Encasement, Inc. to apply the system. Manufacturer's written verification of applicator approval is required.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Containers and Packaging: Deliver materials in original sealed containers, clearly marked with: Manufacturer's logo; full product name; and lot number(s).
- B. Storage: Store materials between 40°F and 100°F with careful handling to prevent damage to products. If conditions exceed these ranges, special consideration in storage must be taken. Do not store at high temperatures in direct sunlight.
- C. Protection: Protect all materials from freezing and other damage during transit, handling, storage, and installation.

1.05 PROJECT CONDITIONS

- A. These minimum recommendations for material usage are for ideal conditions. The number of gallons per 100 square feet may need to increase due to uneven application, rough surface texture wind conditions while spraying and/or other variables.
- B. Wet insulation must be thoroughly evaluated and then addresses with removal or other measures. Consult a GLOBAL Encasement Technical Consultant regarding the need for moisture surveys and other assessments.

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- C. Structural cracks should be referred to the appropriate GLOBAL Encasement Technical Consultant.
- D. This installation guide specification assumes that the deck, if plywood, has no dry rot, and is in sound condition, or has been repaired.
- E. Do not apply materials unless surface to receive acrylic roofing system is clean, dry and prepared as specified.
- F. Install all material in strict accordance with all published safety, weather, or applicable regulations of the manufacturer and/or local, state, and/or federal agencies that have jurisdiction.
- G. The entire system shall be fully adhered to the surface on which it is applied. Voids left under the system by creating bridges are not acceptable.
- H. Do not proceed with application of coating or sealing materials when temperature is less than 50°F. No coating system shall be applied if weather will not permit it to dry before exposure to precipitation or freezing.
- I. Heavy puddles of coating on the roof are not acceptable.
- J. Instructions for use of all roofing materials and application equipment should be read and followed at all times.
- K. As a general principle, to prevent the ponding of water, install additional drains as necessary or install drainage systems with sprayed polyurethane foam (SPF).

1.06 DETAIL WORK

- A. This specification does not extensively outline procedures for preparation and finishing of drains, vents, ducts, flashings, parapet walls, sheet metal work, etc. The contractor should outline this work before work commences, and work shall be performed observing good trade practices.

II. PRODUCTS

2.01 GLOBAL ENCASEMENT SYSTEM

- A. The roofing system is 100% acrylic, elastomeric, spray-applied GLOBAL Encasement System manufactured by GLOBAL Encasement, Inc.
- B. Underwriters Laboratories® 790 Class "A" Ratings TGFU #R15397
- C. Physical properties of Cured Roofing System: The testing of the coating shall be done under ASTM-D6083, "Standard Specification for Liquid Applied Acrylic Coating Used in Roofing", unless otherwise specified.
 - 1. The roofing system shall have good resistance to ponding water.
 - 2. The roofing system shall contain no plasticizers.
 - 3. The roofing system shall contain no migrating fire retardants.
 - 4. The roofing system shall have a Class A fire rating on a noncombustible deck when tested according to the procedures outlined in ASTM E-108.
 - 5. The roofing system shall also meet the following physical property requirements:

Property	ASTM Method	Results
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Tensile Strength, psi (Max @ 73°F)	D6083	Minimum 250
% Elongation @ Break (73 °F)	D6083	Minimum 250
Permeance, perms	D6083	Maximum 15
Volume Solids % Weight Solids %	D6083	> 50 > 65

2.02 RELATED MATERIALS

- A. The manufacturer of the coatings shall approve flashing, adhesives, thinners, elastomeric caulking compounds, primers, and similar materials. All materials used shall be applied in accordance with its manufacturer's recommendations.

2.03 EQUIPMENT

GLOBAL Encasement, Inc. materials are prescreened at the factory and can be applied with nylon bristle brushes, roller, or airless spray equipment. Roller nap size will depend on the substrate being encased; ½ inch nap to 1¼ inch is recommended. Airless piston type spray equipment may also be used for application. Equipment selection will depend on the size and nature of the encasement project.

Recommended airless piston-type spray equipment should have at a minimum 3000-psi, 3:1 ratio and a ¾-gallon capacity.

- A. **Graco** - information line is (800) 690-2894.
B. **Titan Tool Inc.** - information line is (800) 526-5362.
C. **Equipment Accessories:** Hose: 3/8 inch (9.53 mm) inside diameter (minimum), 1/2 inch (minimum) on long runs.
Guns: Graco Silver or Golden Hydra-mastic guns.
Spray Tips: **RoofCoat™**
Use self-cleaning reversible spray tip size 0.019 to 0.035 (.021 is most often used.)

Note: For alternative equipment recommendations consult the spray equipment manufacturer directly.

III. EXECUTION

3.01 MANUFACTUER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins and product guide specification instructions.

3.02 EXAMINATION

- A. Inspect surfaces that will receive the GLOBAL Encasement System to make sure they are clean, smooth, sound, properly prepared, and free of moisture, dirt, debris, or other contamination.
- B. Verify that all roof penetration, mechanical equipment, cants, edge metal, and other on-roof items are in place and secure.
- C. Verify that all critical areas around the immediate vicinity of the spray are suitably protected.

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- D. Verify all roof drains are clean and in working order.
- E. Verify that all air conditioning and air intake vents are suitable protected or closed.

3.03 PREPARATION

- A. The surface must be clean, sound, dry, and free of any materials that would inhibit proper adhesion of the coating or sealant. Achievement of this condition may require the use of **PremeClean™**, scraping, power brooming, vacuuming or other means, and shall always be performed observing responsible trade practices.
- B. All loose seams of existing roof system shall be sealed in accordance with the Hypalon® manufacturer's recommendations. Then seal all Hypalon® single ply seams with **GEI Seam Tape**.
- C. Seal all HVAC ductwork joints as needed with **Globe Caulk™** and **GEI Fabric** or **GEI Seam Tape** and Butyl Caps.
- D. Reseal around all mechanical equipment and roof penetrations with **Globe Caulk™**.
- E. All valley areas, waterways, drain areas or other area where potential water accumulation is a concern, apply either **RoofCoat™**, **AsbestoSafe®** or **Your Last Coat™** TopCoat at the rate of 2 gallons per 100 square feet (32 wet mils = 18 to 20 dry mils), approximately 46 inches wide. Immediately embed 40 inch wide **GEI Fabric** into the wet coating, with a second coat of either **RoofCoat™**, **AsbestoSafe®** or **Your Last Coat™** TopCoat being immediately applied on top of the fabric at the rate of 1 gallon per 100 square feet (16 wet mils = 9 to 10 dry mils). Both the first and second coats shall extend a minimum of 2 inches beyond the edges of the **GEI Fabric**. In any large valley area, multiple widths of fabric should be used, overlapping them a minimum of 3 inches so that the coating and fabric extend at least six inches up above the potential waterline.
- F. Allow coating to dry thoroughly (normally 6 to 24 hours), before proceeding to application of the remainder of the roofing system as described in section 3.04 of this guide specification.

3.04 APPLICATION

- A. After thorough preparation as necessary, the entire roof shall receive the GLOBAL Encasement System consisting of 3 gallons per 100 square feet (48 to 53 wet mils = 30 to 32 dry mils) of either **RoofCoat™**, **AsbestoSafe®** or **Your Last Coat™** TopCoat, applied evenly in two separate coats.
- B. The first coat shall be spray or roller applied at the rate of 1½ gallons per 100 square feet (24 to 26 wet mils = 14 to 16 dry mils). Back roll initial coat.
- C. After thorough drying of the first coat (normally 4 to 12 hours), the second coat shall be applied using a crosshatch technique, at the rate of 1½ gallons per 100 square feet (24 to 26 wet mils = 14 to 16 dry mils).
- D. All coating edges shall be cut in evenly in a uniform manner so as to provide an aesthetically pleasing appearance.

3.05 FIELD QUALITY REQUIREMENTS

- A. Manufacturer's Field Services: Inspection by a GLOBAL Encasement, Inc. Authorized Sales Representative can be made to verify the proper installation of the system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the contractor's expense. On a case-by-case basis, payment of

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expenses incurred by the GLOBAL Encasement, Inc. Representative may be the responsibility of the building owner and/or contractor.

- B. Manufacturer's inspection or verification shall not constitute acceptance of responsibility for any improper application of material.
- C. **Disclaimer:** GLOBAL Encasement, Inc.'s employees and/or Authorized Sales Representatives are not responsible for any liabilities resulting from the application or use of these materials.

3.06 CLEANING

- A. Surfaces not intended to receive the GLOBAL Encasement System shall be protected during the application of the system. Should this protection not be effective, or not be provided, the respective surfaces shall be restored to their proper conditions by cleaning, repairing or replacing. All debris from completion of work shall be removed from the project site.

IV. MATERIALS

The following materials listed in these recommendations are available from:

GLOBAL Encasement, Inc.
701 E. Santa Clara St.
Ventura, CA 93001-5972 USA
(800) 266-3982 / Fax (800) 520-3291
Website: www.encasement.com

1. **RoofCoat™, AsbestoSafe® or Your Last Coat™ TopCoat**
2. **PremeClean™ Industrial Cleaner**
3. **Globe Caulk™**
4. **GEI Seam Tape**
5. **GEI Fabric**

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. The prospective user should determine the suitability of our materials and installation recommendations before adopting them for commercial use.

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