



GLOBAL Encasement, Inc.

Installation Guide Specification Contaminated Soil 09940 GEI – Your Last Coat™

I. GENERAL

1.01 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install spray, brush or roller-applied specialty Elastomeric acrylic **Your Last Coat™** system as outlined in this specification.
- B. GLOBAL Encasement, Inc.'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 laboratory reports and literature verifying compliance with fire ratings, physical properties or approvals earned by specified materials.
- B. Submit material safety data sheets on all materials.

1.03 QUALITY ASSURANCE

- A. Supplier Qualifications: GLOBAL Encasement, Inc. products, as supplied by GLOBAL Encasement, Inc., shall be 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: GLOBAL Encasement, Inc. can approve the application contractor. GLOBAL Encasement, Inc.'s written verification of applicator approval shall be required.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Containers and packaging: Deliver materials in original sealed containers, clearly marked with GLOBAL Encasement, Inc.'s logo, brand name, product lot numbers and type of material.
- B. Storage: Store materials between 40°F and 100°F with careful handling to prevent damage to products. Do not store for long periods in direct sunlight, at excessive temperatures or at temperatures below freezing.
- C. Protection: Protect all materials from damage during transit, handling, storage, and installation.
- D. Verify dates of manufacture and confirm that material is within current shelf life.

1.05 PROJECT CONDITIONS

- A. Environmental Requirements Conditions
 - 1. These minimum recommendations for material coverages are for ideal conditions. The number of gallons to coat 100 square feet may need to be increased due to uneven application, rough surface texture, heat and wind conditions while spraying or applying and other variables.
 - 2. Do not apply materials unless surface to receive encasement system is dry and surface compatibility testing has been successfully completed.
 - 3. Install all material in strict accordance with all published safety or applicable regulations of local, state, and/or federal agencies that have jurisdiction.

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4. The entire system shall be fully adhered to the surface on which it is applied.
5. Do not proceed with application of coating or sealing materials when surface temperature is less than 50°F. No coating system shall be applied if weather will not permit it to dry prior to exposure to precipitation or freezing.
6. Instructions for use of all GLOBAL Encasement, Inc. materials and application equipment should be read and followed at all times.

II. PRODUCTS

2.01 GLOBAL Encasement, Inc. Systems

- A. The **Your Last Coat™** system is an acrylic, elastomeric, spray, brush or roller-applied GLOBAL Encasement, Inc. system manufactured by GLOBAL Encasement, Inc. (GEI).
 1. All **Your Last Coat™** materials shall be warranted to be heavy-bodied (66.0% solids content), from GLOBAL Encasement, Inc. and shall be long lasting, highly-pure (zero VOC) materials that remain flexible, chalk resistant and resist cracking, peeling, algae and fungus that can cause future indoor air quality concerns.
 2. To allow for building movement without cracking or disturbing fibrous materials, coating systems shall have passed testing to ASTM standards for adhesion, permeability, aged flexibility and with aged elasticity for the encasement system of over 250%.
 3. Coatings shall be Class A Fire Rated, water-based, non-toxic, safe and easy to use, contain no hazardous ingredients by OSHA definition, comply with all known building codes and be non-flammable.
 4. Coatings shall have independent third-party accredited toxicological report stating: "There is no toxicological basis for limiting occupancy of a dwelling unit, or restricting entry of any resident including pregnant women and children under six years of age, to dwelling units during the application of your encapsulant."
 5. Coating materials shall have zero VOC (Volatile Organic Compound) content.
 6. Coating materials shall not release health threatening toxic smoke and fumes in a fire and shall comply with all known building codes.
- B. Coating Material shall have passed the following testing standards:
 1. ASTM E-119 fire tests - demonstrating that applying a multi-layer GLOBAL Encasement, Inc. system over fireproofing does not adversely affect the fire proof rating of the fireproofing (3 hour test).
 2. UPITT Combustion Toxicity Test proving nothing toxic is released in a fire.
 3. ASTM E-84 and E-162 fire tests for "Class A" – Surface Flammability and Burning Characteristics (Flame Spread = 0, Smoke Developed = 5). This is equal to NFPA 255, UL No. 723, ANSI 2.5 and U.B.C. 42-1.
 4. Underwriters Laboratories® 790 Class "A" Ratings TGFU #R15397
 5. "Pull-off Adhesion" Test E-736 at 9,950 lbs. per square foot (69.1 lbs. per square inch).
 6. ASTM D-1653 and E-96 "Water Vapor Permeability" (showing the rate that water vapor can pass through the system).
 7. Impact Resistance, "Tensile Strength" exceeds 150 psi; "Elongation" exceeds 250%.
 8. System is Mildew Resistant, Impact Resistant, Scrub Resistant, Non-Yellowing, Non-Caulking, highly Blister Resistant, Rust Resistant, highly Chemical Resistant and remains flexible after 1000 hour ASTM Accelerated Weather testing.

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9. Water-Based materials (zero VOC) Volatile Organic Content of **PrepLESS Primer™** = 0 g/L and **Your Last Coat™** = 4 g/L.
10. Encasement systems shall comply with standards established by WR Grace for use over fireproofing materials.
11. Materials comply with applicable standards for installation on interior and/or exterior surfaces of a building.
12. Fully comply with the U.B.C. codes for installing encasement systems in elevator shafts and large air plenums or ducts.
13. Encasement systems provide additional waterproofing protection.
14. Materials are suitable for use over Transite siding.

2.02 RELATED MATERIALS

Elastomeric architectural sealants, caulking compounds, primers, and similar materials. All materials used shall be applied in accordance with GLOBAL Encasement, Inc.'s recommendations.

2.03 EQUIPMENT RECOMMENDATIONS

GLOBAL Encasement, Inc. materials are prescreened at the factory and can be applied with nylon bristle brushes, roller, or airless 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: **Your Last Coat™**
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 MANUFACTURER'S INSTRUCTIONS

Compliance with GLOBAL Encasement, Inc.'s product data, including product technical bulletins and product guide specification instructions.

3.02. PREPARATION

All surfaces to be encased should be free of visible water.

3.03 APPLICATION

- A. To start the encasement application process, aerate the surface and spray a coat of **MPE™**.
- B. Lock down dust and dirt on the surfaces being encased by spraying a coat of **PrepLESS Primer™**.
If there is an excessive amount of loose dirt and debris to be encased, allow this coat to thoroughly dry, then continue with the balance of the application of **PrepLESS Primer™** as described below.

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- C. Apply **PrepLESS Primer™** until wet coating thickness is great enough to yield 6 to 12 dry mils or 12 to 24 wet mils thickness uniform membrane. The **PrepLESS Primer™** material seals, penetrates and stabilizes. Apply the balance of the **PrepLESS Primer™** material in two passes with the second pass perpendicular (at 90°) to the first pass.

Use wet mil gauge to monitor application thickness on a flat surface.

- D. Allow **PrepLESS Primer™** to dry to touch in 2 to 24 hours before applying any topcoat materials. When applied, the liquid **PrepLESS Primer™** material can penetrate and be absorbed into the substrate being encased. The **PrepLESS Primer™** then shrink-wraps as it dries.

Note: PrepLESS Primer™ goes on milky white and dries clear, forming a flexible membrane that remains tacky when dry.

- E. **PrepLESS Primer™** coverage rate per gallon varies depending upon porosity, texture, condition of the surface, configuration of the surfaces being encased, tip size and spray pressure and the final mil thickness specified. Rough, highly textured insulation surfaces often have a developed area that is 1½ to 3 times the flat-surface area.

Some typical coverage rates for **PrepLESS Primer™** on various building surfaces are listed below:

1. Applied over a smooth, flat surface at 100 SF per gallon (16 wet mils) = 7 to 8 dry mils thickness.
2. Flat surfaces - 90 to 110 SF per gallon (14-16 wet mils = 7-8 dry mils)
3. Porous, textured surfaces - 70 to 100 SF per gallon (16-20 wet mils = 7-8 dry mils)
4. Rough, cementitious surfaces - 40 to 70 SF per gallon (20-30 wet mils = 7-8 dry mils)
5. Rough surfaces - 30 to 50 SF per gallon (25-35 wet mils = 7-8 dry mils)
6. Oversprayed – 90 to 110 SF per gallon (14-16 wet mils = 7-8 dry mils)
7. Over stucco - 150 to 200 SF per gallon (6 to 8 wet mils = 3 to 4 dry mils)
8. Impact or wear areas, thicker applications up to 40 dry mils can be applied to seal, stabilize and protect the surface.

- F. Next spray apply **Your Last Coat™** until wet coating thickness is great enough to yield the desired dry mil thickness. Apply topcoat in two passes; with the second pass perpendicular (at 90°) to the first pass. Allow **Your Last Coat™** to dry to touch in 2-6 hours before applying additional materials. Because the **PrepLESS Primer™** has already stabilized the surface, the use of gentle brushing or back rolling after spraying **Your Last Coat™** can help to fill visible voids and holidays while conserving the use of materials.

A finished encasement system shall be seamless and form a continuous, flexible jacket around the surface to be encased (no voids or holidays in finished coating surface).

- G. **Your Last Coat™** coverage rate per gallon varies depending upon porosity, texture, condition of the surface and the mil thickness. Rough, highly textured insulation surfaces require more material than flat or smooth non-porous surfaces.

Calculated coverage rates for **Your Last Coat™** on a flat, smooth non-porous surface at 100 SF per gallon applied @ 16 wet mils = 9 to 10 dry mils per coat. Some typical coverage rates for **Your Last Coat™** on various surfaces are listed below:

1. Over flat surfaces – 90-100 SF per gallon (14-16 wet mils = 9-10 dry mils)
2. Porous or textured surfaces – 70-90 SF per gallon (17-21 wet mils = 9-10 dry mils)
3. Rough, cementitious surface – 30-70 SF per gallon (21-30 wet mils = 9-10 dry mils)

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4. Rough surfaces – 30-50 SF per gallon (25-35 wet mils = 9-10 dry mils)
 5. Oversprayed – 90-110 SF per gallon (14-16 wet mils = 9-10 dry mils)
 6. Over stucco – 50-70 SF per gallon (20-25 wet mils = 13-15 dry mils)
 7. Some surfaces require two applications of **Your Last Coat™** at 9-10 dry mils (16 wet) per coat.
 8. Total protection of 16-20 dry mil thickness of topcoat is required for 20-Year Limited Warranty.
- H. Follow all applicable state and/or federal OSHA Guidelines.
- I. Once dry, cut out the surface into manageable sizes, flip over and roll up as shown in the application guideline illustration.
- J. Seal all ends with the **GEI Seam Tape** to ensure that no encased material is released.
- K. Dispose as required by state and/or federal laws.

3.04 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. On a case-by-case basis, payment of expenses incurred by the GLOBAL Encasement, Inc. Representative may be the responsibility of the building owner and/or contractor.
- B. GLOBAL Encasement, Inc.'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.

3.05 CLEANING

Use soapy water while coatings are still wet and wipe clean. Surfaces not intended to receive GLOBAL Encasement, Inc. system shall be protected during the application process.

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. **Your Last Coat™ TopCoat**
2. **PrepLESS Primer™**
3. **MPE™ Multi-Purpose Encapsulant**
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.