

CONCRETE / CMU WALL SYSTEM SUMMARY

This is a generic summary of IPC's more detailed **CONCRETE/CMU WALL SYSTEM SPECIFICATION**. For warranty purposes, Approved Applicators are responsible for studying, understanding, and following the specification. As always, contact IPC for technical assistance.

I. SURFACE PREPARATION

1. Pressure wash surface to be coated using TSP or other suitable cleaner and rinse with water.
2. Repair voids, fissures, and other problem areas with **ACRYCAULK™** and allow to cure overnight.
3. Repair seriously damaged areas with concrete. Allow sufficient curing time.

II. COATING APPLICATION

1. The surface to be coated must be clean and dry.
2. Apply **ACRYLINK G™** elastomeric roof coating with an airless sprayer or roller, giving special attention to repaired areas.
3. Use an appropriate number of coats to achieve the correct millage.
 - a. 5-year: 2.3 gallons of **ACRYLINK G™** per square total.
 - b. 10-year: 3.2 gallons of **ACRYLINK G™** per square total.
4. Backroll the base coat as it is being applied.
5. Allow each coat to dry, inspect and repair as necessary before applying next coat.
6. Apply 0.5 gallons per square (200 square feet per gallon) of **ACRYSHEEN™** surface coating as a top coat.

III. LIMITATIONS

1. This procedure is to be used only in conjunction with commonly accepted waterproofing and masonry standards.
2. No material shall be applied to wet, dirty, or frozen surfaces.
3. **ACRYLINK G™**, **ACRYCAULK™**, and **ACRYSHEEN™** shall not be applied during inclement weather, when a precipitation appears imminent, when the temperature is below 45 °F, when the relative humidity exceeds 85%, or within 4 hours of sundown.
4. In order to qualify for factory warranty, applicator must have Approved Applicator status, the surface must meet the square foot minimum, the **ACRYLINK G™** membrane must be continuous, and the membrane must meet the TDM minimum.
5. In conjunction with the final inspection, all debris, material, and equipment are to be removed from the job site, leaving the area in an undamaged and acceptable condition.

CONCRETE / CMU WALL SYSTEM SPECIFICATION

Section 1.0 Scope

The intention of this specification is to outline procedures for the application of an **ACRYLINK G™** elastomeric coating membrane for the purposes of waterproofing, protecting, extending the life, and/or renewing an existing concrete or CMU wall substrate. This specification describes materials, methods, and conditions necessary for the proper installation of this membrane.

Section 2.0 Materials

All materials shall be manufactured or approved by IPC, and shall meet the following minimum specifications:

- 2.1 **ACRYLINK G™** Elastomeric Coating
 - Vehicle Type Crosslinking Acrylic
 - Pigment to Vehicle Ratio 1.5 to 1
 - Solids (Volume) 63%
 - Elongation 360%
 - Tensile Strength 304 psi
 - Permeance @ 45 mils 2.21 perms
 - Reflectivity (White) 79%
- 2.2 **ACRYCAULK™** Brush or Trowel Grade Sealant
 - Vehicle Type 100% Acrylic
 - Pigment to Vehicle Ratio 1.97 to 1
 - Solids (Volume) 70%
 - Elongation 325%
- 2.3 **ACRYSHEEN™** Surface Coating
 - Vehicle Type 100% Acrylic
 - Pigment to Vehicle Ratio 1.2 to 1
 - Gloss Medium Low
 - Color Bright White (tintable)
 - Reflectivity (untinted) 80%
- 2.4 Delivery and Storage
 - 2.4.1 Materials shall be delivered in their original, tightly sealed containers or unopened packages, clearly labeled with the manufacturer's name, Underwriter's Laboratories file number, and—where appropriate—product identification and lot numbers.
 - 2.4.2 Materials shall be kept from freezing, and shall be stored out of the weather, in their original tightly sealed containers or unopened packages, as recommended by the manufacturer.

Section 3.0 Contractor

- 3.1 The **ACRYLINK G™** elastomeric coating membrane shall be applied by a single, experienced, and competent contractor or applicator, approved by IPC.
- 3.2 Contractor or applicator shall be responsible for selecting and supplying all labor and supervision, and shall be responsible for furnishing all materials required to complete the job satisfactorily, in accordance with manufacturer's specifications.
- 3.3 Contractor or applicator shall be responsible for assessing and determining the integrity of the existing substrate. All structural repairs shall be the exclusive responsibility of the contractor or applicator.
 - 3.3.1 All repairs shall be completed before coating application commences.
 - 3.3.2 All repairs shall be performed in accordance with commonly accepted masonry and waterproofing standards and practices.

Section 4.0 Surface Preparation—Cleaning

Preparations shall include all requirements specified by IPC to ensure adequate adhesion of the **ACRYLINK G™** elastomeric coating

membrane to the substrate surface. Preparation shall include, but shall not be limited to, the following:

- 4.1 All structural repairs shall be completed before coating application commences.
- 4.2 The entire surface to be coated shall be pressure washed in order to remove all loose texture, dust, dirt, debris, chalk, oil, tar, and the like from the substrate surface. A suitable cleaner, such as TSP, and a broom shall be used as necessary. If a cleaner is required, the surface shall be rinsed with water to remove residue.

Section 5.0 Surface Preparation—Repairs

Preparations shall include all requirements specified by IPC to ensure adequate adhesion of the **ACRYLINK G™** elastomeric coating membrane to the substrate surface.

Preparation shall include, but shall not be limited to, the following:

- 5.1 All penetrations and transitions shall be inspected and repaired as necessary in order to ensure that there is an adequate seal before coating application commences.
- 5.2 Voids, fissures, and other problem areas shall be repaired with **ACRYCAULK™** sealant and allowed to cure overnight before coating application commences.
- 5.3 Seriously damaged areas shall be repaired in accordance with commonly accepted masonry practices. Manufacturer of repair materials shall be consulted for specifications.

Section 6.0 Coating Application

- 6.1 Coating application shall not commence during inclement weather, when a precipitation appears imminent, when temperature is below 45 °F, or when relative humidity exceeds 85%. To provide adequate curing time, coating application shall terminate at least four (4) hours before sundown.
- 6.2 Entire surface to be coated shall be free of dust, dirt, tar, oil, moisture, frost or any other material that would impair the adhesion of **ACRYLINK G™** elastomeric coating to the substrate surface.
- 6.3 **ACRYLINK G™** elastomeric coating: Base Coat
 - 6.3.1 The base coat of **ACRYLINK G™** shall be applied at a minimum rate of ¾ gallon per 100 square feet using conventional airless spray equipment or rollers.
 - 6.3.2 Coating shall be applied so as to cover the substrate uniformly. All repaired areas shall be coated again at this time, and during each subsequent coat.
 - 6.3.3 The base coat may be applied in more than one pass, if desired, to accelerate curing, provided adequate curing time has been allowed between passes.
 - 6.3.4 If sprayed, the base coat (the first pass of the base coat if applied in multiple passes) shall be backrolled as it is being applied in order to maximize adhesion to the substrate and to eliminate voids.
 - 6.3.5 The base coat shall be allowed to cure for at least two (2) hours, depending on temperature and humidity conditions, after which an inspection shall be performed. Any defects in the coating membrane shall be repaired with **ACRYLINK G™** or an approved building sealant.
- 6.4 **ACRYLINK G™** elastomeric coating: Subsequent Coats
 - 6.4.1 **ACRYLINK G™** coating may be applied in contrasting color coats. Order of application shall be as contractor specifies.
 - 6.4.2 The surface of the **ACRYLINK G™** base coat, and all subsequent coats, shall be free of all moisture, dirt, and debris before a subsequent coat is applied.

- 6.4.3 The second coat of **ACRYLINK G™** shall be applied as soon as practical, within 24-72 hours of the application of the base coat.
- 6.4.4 The second coat, and all subsequent coats, shall be applied at a right angle to the direction in which the previous coat was applied. For example, if the previous coat was applied with an up-down motion, the subsequent coat shall be applied with a left-right motion.
- 6.4.5 The second coat, and all subsequent coats, shall be applied by conventional airless spray or roller at the rate specified to achieve the TDM minimum in a reasonable number of coats. Each coat shall completely mask the color of the previous coat.
- 6.4.6 The second coat, and all subsequent coats, may be applied in more than one pass, if desired, to accelerate curing, provided adequate curing time has been allowed between passes.
- 6.4.7 Subsequent coats shall be applied by conventional airless spray or roller at the rate required to achieve the TDM minimum. It is essential to realize that the true surface area may be greater than the apparent surface area because of surface texture or profile. In order to achieve the TDM minimum on such a surface, the application rate must be increased appropriately.
- 6.4.8 Each coat shall be allowed to cure for at least four (4) hours, depending upon temperature and humidity conditions, and inspected and repaired as necessary, before a subsequent coat is applied.
- 6.5 **ACRYSHEEN™** surface coating: Top Coat
 - 6.5.1 A top coat of **ACRYSHEEN™** surface coating shall be applied by conventional airless spray or roller at a minimum rate of ½ gallon per 100 square feet. **ACRYSHEEN™** shall not be substituted for **ACRYLINK G™**.
 - 6.5.2 Surface coat may be applied in more than one pass, if desired, to accelerate curing. Adequate curing time shall be allowed between passes.
 - 6.5.3 Surface coat shall be applied at a right angle to the direction in which the previous coat was applied. Surface coat shall completely mask the color of the previous coat.
 - 6.5.4 Surface coat shall be allowed to cure for at least four (4) hours, and inspected and repaired as necessary, before a subsequent coat is applied.
- 6.6 The cured **ACRYLINK G™** elastomeric coating system membrane shall be TDM minimum in all areas and shall be free of all pinholes and defects.
- 6.7 Required spread rates for the **ACRYLINK G™** membrane are as follows:
 - 6.7.1 5-year application: 2.3 gallons per 100 square feet of **ACRYLINK G™** and 0.5 gallons per 100 square feet of **ACRYSHEEN™** total (25.5 dry mil average, 21 dry mil minimum).
 - 6.7.2 10-year application: 3.2 gallons per 100 square feet of **ACRYLINK G™** and 0.5 gallons per 100 square feet of **ACRYSHEEN™** total (35 dry mil average, 30.5 dry mil minimum).
- 6.8 Having completed the procedures specified above, and having achieved the TDM minimum in all areas, the **ACRYLINK G™-ACRYSHEEN™** membrane shall be given adequate time to cure.

Section 7.0 Below-Grade Application

- 7.1 Coating application shall not commence during inclement weather, when a precipitation appears imminent, when temperature is below 45 °F, or when relative humidity exceeds 85%. To provide adequate curing time, coating application shall terminate at least four (4) hours before sundown.
- 7.2 Entire surface to be coated shall be free of dust, dirt, tar, oil, moisture, frost or any other material that would impair the adhesion of **ACRYLINK G™** elastomeric coating to the substrate surface.
- 7.3 **ACRYLINK G™** elastomeric coating shall be applied below-grade according to sections 6.3 and 6.4 of this specification. The required spread rate for the below-grade **ACRYLINK G™** membrane shall be 4.6 gallons per 100 square feet of **ACRYLINK G™** total (46 dry mil average, 40 dry mil minimum).
- 7.4 **ACRYLINK G™** elastomeric coating shall be allowed to cure for at least ten (10) days before back-filling takes place.

Section 8.0 Clean-Up

Upon completion of all work covered in this specification, and before the job is inspected, the contractor shall remove all equipment, material, and debris, leaving the area in an undamaged and acceptable condition. In no case shall the job be considered complete before the job site has been properly cleaned.

Section 9.0 Limitations

This system is to be used only in conjunction with commonly accepted waterproofing and masonry standards including but not limited to the following:

- 9.1 In order to qualify for a factory warranty, applicator must have Approved Applicator status, the roof must meet the square foot minimum, the **ACRYLINK G™** membrane must be continuous, and the membrane must meet the TDM minimum.
- 9.2 No application of component materials shall commence during inclement weather, when a precipitation appears imminent, when temperature is below 45 °F, or when relative humidity exceeds 85%.
- 9.3 No material shall be applied to wet, dirty, or frozen surfaces.
- 9.3 In conjunction with the final inspection, all debris, material, and equipment are to be removed, leaving the area in an undamaged and acceptable condition.