

AWS-PVDF INSTALLATION GUIDE

Fluoropolymer Coating System

Metal Wall Panels

1. DESCRIPTION

The Acrymax AWS-PVDF System is a fluoropolymer coating system designed to provide superior protection and architectural color to metal wall panels and other suitable substrates. This system exhibits excellent weatherability and durability. Fluoropolymer coatings provide outstanding color retention and resistance to fading. Acrymax Coatings are waterborne materials that are VOC compliant. The AWS-PVDF System as specified herein will yield an average dry film thickness of 7-10 mils.

2. MATERIALS

PC-125 Rust Inhibitive Primer
PC-535 Elastomeric Rust Inhibitive Primer
AF-5500 PVDF Fluoropolymer Coating

3. APPLICATION EQUIPMENT

Acrymax coatings can be applied by brush, roller, or spray. Spray equipment for AF-5500 should be capable of 1500 psi with output of 1 gallon per minute. A "Reverse-a-Clean" tip with tip size .015 to .021. Rollers should be medium nap. Brushes can be used for small areas.

4. INSTALLATION

Installation of the AWS-PVDF System is done in 4 basic steps:

- a. Preparation & Repair
- b. Priming
- c. Application of Fluoropolymer Coatings
- d. Inspection

(a) Preparation & Repairs

Acrymax coatings must have a clean surface to adhere to. Proper surface preparation is the key to successful applications of all coating systems! All loose dirt, debris, paint, oils etc. must be removed by the most effective method possible. High pressure water is the

recommended method. Detergents suitable for paint preparation such as TSP substitutes and/or cleaners to remove soluble salts should be used as necessary. Allow surfaces to dry thoroughly after washing before applying coatings.

Areas where corrosion has occurred must be properly prepared. Inadequate preparation of corroded metal surfaces can lead to premature failure of the coating system. Rust must be removed using the most rigorous method suitable for each particular job. Jet water blasting, sand blasting, and power wire brushing are effective. Coatings must not be applied over loose untreated rust.

Review Acrymax technical bulletins about preparation methods or consult Acrymax for additional information about preparation of metal surfaces.

(b) Priming

Adhesion tests should be done to determine if the coating system has adequate adhesion to the surface to be coated. A primer may be necessary on some projects. Consult Acrymax for additional information.

Areas where rust has been removed must be primed with PC-125 or PC-535 rust inhibitive primer. Review product data sheets for these products for application and coverage information.

(c) Application of Fluoropolymer Coatings

The AWS-PVDF system should be applied to achieve a dry film thickness of 7 – 10 mils. The 7 mil system would be applied in a minimum of 2 coats and the 10 mil system would be applied in a minimum of 3 coats. Consideration must be

given to overspray and/or applicator inefficiencies when calculating material requirements.

2 Coat System – 7 mil dry film thickness

1st coat

Apply Acrymax AF-5500 Fluoropolymer Coating at a **minimum** application rate of 1/2 gallon per 100 square feet

2nd coat

Apply Acrymax AF-5500 Fluoropolymer Coating at a **minimum** application rate of 1/2 gallon per 100 square feet

3 Coat System – 10 mil dry film thickness

3rd coat

Apply Acrymax AF-5500 Fluoropolymer Coating at a **minimum** application rate of 1/2 gallon per 100 square feet

If specified dry film thickness is not achieved in 2 or 3 coats then additional coats will be necessary.

(d) Inspection

Inspect entire area covered and touch-up deficient areas with additional Acrymax AF-5500 as necessary to insure complete and uniform coverage.

5. LIMITATIONS

These are general guidelines for application of the Acrymax AWS-PVDF System. The material requirements may vary depending on the specific job requirements. If unusual conditions exist, contact Acrymax Technical Service at 610-566-7470. Acrymax coating systems must be applied to structurally sound substrates. All surfaces must be clean and dry before application of coatings. The suitability of Acrymax coatings or systems for an intended use shall be solely up to the user. Drying time and coverage are not guaranteed. Failure of the substrate does not constitute failure of the Acrymax coating or system. Acrymax Coatings should not be applied when rain or freezing temperatures are expected within 24 hours of application.

6. WARRANTY

Acrymax offers limited material warranties for the AWS-PVDF System when all materials are used in strict accordance with all of Acrymax's written requirements and recommendations. Acrymax's sole responsibility under this limited material warranty is for defective material and Acrymax's only obligation shall be to either replace or refund the purchase price of the materials or part thereof proven to be defective. This warranty gives specific legal rights and you may have other legal rights that vary from state to state. No statement by anyone may supersede this limited material warranty, except when done in writing by Acrymax's Technical Service Office in Media, PA.

NOTES:

1. Acrymax coatings are waterborne. Consequently application of these materials must not be done when rain or other conditions such as fog or heavy dew are possible before coating can dry sufficiently to be resistant to these occurrences. Drying time is affected by numerous factors including temperature, direct sunlight, relative humidity, air movement, thickness and color of applied coating, etc. Under proper conditions dry times for coatings will be from 1 to 2 hours, but under adverse conditions dry times can range from 8-12 hours or more. Application should not be done when temperatures are below 50°F or expected to drop below freezing within 24 hours after application or before coating is dry. Special attention should be given to the dew point temperature because when this temperature is reached and dew forms the drying process of the coatings will cease.
2. Surfaces must always be clean before application of coatings. Care must be taken to insure that extended time intervals after original cleaning do not interfere with any stage of the coating applications. If either condition occurs then cleaning may be required again.
3. Adequate coating thickness is essential to performance. If the applicator is unfamiliar in gauging application rates, we suggest that a controllable area be measured and the specified material be applied. In all cases all minimum specified material must be applied and proper minimum dry film thickness' must be achieved. Care must be taken to insure that all areas are coated

- sufficiently to provide a continuous uniform film.
4. Consult Acrymax Technologies if any deviations from published specifications are considered. Unapproved deviations from specified application rates may seriously affect the coating system performance, and shall be undertaken at the specifier's, applicator's or building owner's own risk.
 5. All work must be done in accordance with all applicable local, state, and federal regulations. If hazardous materials such as lead based paint are encountered all proper precautions must be taken and all proper procedures followed.

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