

ARS-3-C20 INSTALLATION GUIDE

PROTECTIVE – REFLECTIVE – COLOR COATING SYSTEM CONCRETE ROOFS

1. DESCRIPTION

The Acrymax ARS-3-C20 Coating System is specified for use on concrete roofs. It is used as a reflective coating system for energy savings, as a maintenance coating, or as a color coating for architectural or aesthetic purposes. This system provides superior weatherability and durability. Acrymax Coatings are waterborne materials that are VOC compliant and exceed all regulatory requirements. This system will provide an average coating thickness of 20 mils. Minimum dry film thickness shall be 17 mils.

2. MATERIALS

The materials used in the ARS-3-C20 System may include but not be limited to:

- AF-130BC Basecoat
- AF-130 Finish-coat
- AF-100 Primer

3. APPLICATION EQUIPMENT

Acrymax AF-130 Coatings can be applied by brush, roller, or spray. Airless spray is the most efficient method of application when proper conditions and expertise exist. Spray equipment should be capable of 2500 – 3000 psi with output of 1 to 2.5 gallons per minute. A “Reverse-a-Clean” tip with a tip size from .027 to .041 should be used. Application by roller or brush may require additional coats to achieve uniform membrane thickness, but material requirements will generally remain the same. Rollers should be medium or long nap. (1/2” or 3/4” are recommended)

4. INSTALLATION

Installation of the ARS-3-C20 System is accomplished in three (3) basic steps:

- a. Preparation
- b. Application of Elastomeric Coatings
- c. Inspection

(a) Preparation

Acrymax AF-130 coatings must have a clean surface to adhere to. Proper surface preparation is the key to successful applications. All dirt, debris, oils etc. must be removed by the most effective method possible. High-pressure water (2500 psi minimum) is the preferred method. Vacuuming, stiff brooming, and low-pressure water washing can also be used. When high-pressure water washing is used it should be done at a pressure suitable to remove dirt and contaminants without damaging the substrate that is being cleaned and care must also be taken to make sure that water does not intrude into the building or the existing roofing system. Cleaner such as TSP (or biodegradable alternative) should be used as necessary. All residues must be thoroughly rinsed off.

Concrete surfaces should be primed with AF-100 prior to application of Acrymax elastomeric coatings. Primer application rates can vary depending on the porosity of the concrete. Application rates generally will be 200-250 square feet per gallon. Porous surfaces may require application at rate of 150 – 200 square feet per gallon. Previously painted or coated surfaces usually do not require primer.

A tape test should be used to determine acceptability of cleaned surface for coating application. This is done by applying masking tape to the surface to be coated, and then peeling off the tape. If the adhesive side of the tape shows contaminants that will interfere with the adhesion of the coatings, then further cleaning or use of a primer may be necessary.

(b) Application of Elastomeric Coatings

Before application of coatings verify that the surface to be coated is cleaned and prepared properly. At any time during application of the

Acrymax system if roof surface becomes contaminated with dirt, dust or other materials that will interfere with adhesion of the coatings then cleaning measures must be taken to restore the surface to a suitable condition. Dust should be blown off of surfaces to be coated with blowers immediately prior to application of coatings.

1. **Base Coat** – Apply Acrymax AF-130BC in a uniform manner at the minimum application rate of 1.25 gallons per 100 square feet. Allow to dry thoroughly before application of finish coat.
2. **Finish Coat** - Apply Acrymax AF-130 in a uniform manner at the minimum application rate of 1.25 gallons per 100 square feet.

Note: Cross coating should be done for each coat. Contrasting colors should generally be used for each coat to provide a method for insuring uniform and complete coverage. When white or a light color finish coat is specified then the basecoat color should be aluminum gray or off-white. Concrete gray basecoat color or other appropriate contrasting color should be used for other finish coat colors.

(c) Inspection

Inspect entire roof area and touch-up deficient areas with additional Acrymax AF-130 as necessary to insure complete and uniform coverage.

5. LIMITATIONS

These are general guidelines for application of the Acrymax ARS-3-C20 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 and properly prepared surfaces. 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. Acrymax roofing systems must not be applied over wet insulation or related materials. Failure of the substrate does not constitute failure of the Acrymax coating or system. Acrymax systems are designed for use on well drained roofs,

however, they are acceptable for use where poor drainage causes temporary ponding. Acrymax Coatings should not be applied when rain, fog, dew or freezing temperatures are expected before coating is dry.

6. WARRANTY

Acrymax offers a limited material warranty for the ARS-3-C20 System when all materials are used in strict accordance with all of Acrymax's written requirements and recommendations and required dry film thicknesses are achieved. Acrymax's sole responsibility under this limited material warranty is for defective material and Acrymax's obligation shall not exceed the purchase price of the Acrymax materials proven to be defective. Submittal of required documentation is required for warranty. Consult Acrymax for details. No statement by anyone may supersede this limited material warranty, except when done in writing by Acrymax's Technical Service Office in Media, PA.

INSTALLATION 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 2 to 4 hours, but under adverse conditions dry times can range to 12 hours or more. Application should not be done when temperatures are below 45°F or expected to drop below freezing 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. Coatings should be allowed to dry thoroughly between coats. *Minimum* dry time between coats is 4 hours.
3. During extremely hot conditions do not apply coatings, or apply coatings in thinner applications to prevent blistering. Additional coats will be required to achieve specified dry film thickness.
4. The material requirements specified herein are for typical conditions. The number of

gallons required may need to be increased to account for uneven application, applicator inefficiencies, surface texture, or other conditions. In all cases minimum dry film thickness must be achieved.

5. Surfaces must always be clean before application of AF-130 Coatings. Care must be taken to insure that on-site manufacturing emissions or 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.
6. 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 thicknesses must be achieved. Care must be taken to insure that all areas completed including all

flashings, roof penetrations, etc. are coated sufficiently to insure a watertight seal.

7. When applying system over a previously applied coating verify that the existing coating is in good condition and well adhered. Failure of a previously applied coating can cause problems with any system that is subsequently applied.
8. Consult ACRYMAX TECHNOLOGIES if any deviations from published specifications are considered. Unapproved deviations from installation guidelines and specified material requirements may seriously affect the coating system performance, and shall be undertaken at the specifier's, applicator's or building owner's own risk.
9. Applicator must comply with all applicable local, state, and federal regulations if lead based paint or other hazardous materials are encountered.
10. Roofing is hazardous work and coatings are very slippery when wet. Comply with fall protection rules and regulations.

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