



ACRY-CHEM



Acry-Chem is a premium grade roof coating made with 100% acrylic resins. This high solids fluid-applied system consists of a 100% acrylic elastomeric base coat and top coat installed with full fabric reinforcement. High-grade titanium pigments plus an effective biocide package provide a highly reflective, waterproof, breathable membrane to protect existing roof substrates.

Acry-Chem increases heat deflection and offers permanent protection for existing roof materials, eliminating the need for costly tear off or replacement. During high wind up-lift, a fully adhered fabric reinforced membrane will help prevent damage due to the roof system's strength. Full fabric reinforcing is required on all roof surfaces except metal. Acry-Chem exceeds crucial ASTM D-6083 standards, lists a Class A fire rating (UL 790), and is Factory Mutual (FM-4470) Class I roofing system listed for multiple assemblies.

PRODUCT SPECS

- Premium-Grade Formula
- UL 790 Class A
- **Factory Mutual 4470 Approved**
- Meets ASTM D6083
- Highly Heat Reflective
- Mildew-Resistant
- Applied by Roller or Spray
- Non-Toxic - V.O.C. Compliant
- High Albedo

PRODUCT PROPERTIES

- **Weight Solids:** 68% (ASTM D2369)
- **Volume Solids:** 60% (ASTM D5201)
- **Weight per Gallon:** 11.8 lbs (ASTM D1475)
- **Tensile Strength:** 275 psi (ASTM D412)
- **Elongation:** 280% (ASTM D412)
- **Weathering:** 5000 hrs (ASTM D822, G23)
- **Moisture Vapor:** 5.8 perms (ASTM E96)
- **EXCEEDS ASTM D6083 STANDARDS**
- **UV Resistance:** 5000 hrs (ASTM G23)

- **Algae Resistance:** No growth (ASTM G21)
- **Salt Spray Test:** No effect (ASTM B117)
- **Fire Rated:** UL 790 Class A
- **Wind Driven Rain:** 0.3% (Fed. Spec TTC-555B)
- **Bond Strength:** Exceeds Cohesive (ASTM C297)
- **Wind Uplift:** Meets Class 1-90 (FM as 4470)



METHODS OF APPLICATION

Metal Roofing

1. Metal Roof Surfaces to be coated must be free from dirt, dust, and foreign contaminants prior to coating. Power washing is the preferred method. Low pressure cleaning with biodegradable cleaner and clean water, using a bristled brush is secondary.
2. Check all roof fasteners for integrity. Re-tighten or replace as required.
3. Metal which is rusted is to be wire-brushed to remove loose rust and loose existing paint, coating, or sealants. Metal which is unsound shall be replaced with new sheet metal prior to coating.
4. Full prime or spot-prime with a heavy duty metal primer as needed

any solid rusted surfaces prior to coating.

5. Factory finished panels, once oxidized paint is removed by power washing do not require primer. Optional treatment is to prime surfaces with Acry-Chem Primer in a thin film by either low-pressure spray or roll.
6. Either cover all fasteners with Anchor Caps, butyl adhesive fastener covers, or install polyurethane sealant in a "dome" shape over all fasteners prior to coating.



All Weather Surfaces
99-890 Iwaena St
Aiea, HI 96701

PH: 808-487-3043
FX: 808-486-1920
www.allweathersurfaces.com



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METHODS OF APPLICATION

Metal Roofing (continued)

7. Panel seams with gaps of 1/4" to 1/2" are to be caulked with polyurethane sealant. Flush panel seams do not require caulking.

8. Panel seams and overlaps seams are to have Uni-Tape, butyl-adhesive reinforced mesh tape, installed centering the seam under either 2", 4", or 6" wide tape. The 2" tape is typically used on the vertical panel seams, with the 4" or 6" used on the overlap horizontal seams. An alternate method is to install polyester mesh, embedded between 20 mil coats of Acry-Chem while it is wet. Use 4" tape over the vertical panel seams and 6" tape at the overlap joints. Wrinkles, bubbles, and fish mouths at edge of tape will not be accepted.

9. Once above steps are complete, Acry-Chem can be applied at desired rate(s) per warranty section requirements. Application can include brush, roller, or airless spray. Airless spray equipment is recommended to have 1½ gallon per minute output and 2000 psi pressure capability, using a wide fan tip of 0.027" to 0.039".

Built-Up Roofing

1. Built-up Roof Surfaces shall be clean, dry, and free of dirt, dust, and foreign contaminants. Mineral surface modified bitumen roofs shall be swept clean to remove any loose aggregate. Care shall be taken to preserve the integrity of the existing roof surface during cleaning. Power washing is the preferred method. Low pressure cleaning using a biodegradable cleaner and bristled brush is secondary method.

2. Any unsound areas in the roof deck are to be identified, removed, and replaced. This includes blisters, delamination, deterioration, excessive moisture content, etc. as per standard roofing practices. All blisters, wrinkles, delamination, and loose areas are to be cut out and either nailed to deck or adhered with roof cement.

3. Repair areas are to be treated by priming with Acry-Chem Primer, followed by two 20 mil coats of Acry-Chem, embedding polyester fabric between coats. Polyester fabric is available in 4", 6", 12", 20" and 40" widths.

4. Use Acry-Chem Butter Grade Sealant and polyester mesh reinforcing fabric around all penetrations, skylights, vents, hvac, etc. to provide

an elastomeric flashing to the roof deck. Any deteriorated existing flashing is to be removed and/or replaced.

5. Where reinforcing fabric is used throughout the roof "field", it is to be overlapped 2" at edge going with the slope of the roof. All fabric is to be fully adhered without bubbles, wrinkles, and fish mouths at the overlap edge.

6. Once the above steps are complete, Acry-Chem can be applied at desired rate(s) per warranty section requirements. Application can include brush, roller, or airless spray. Airless spray equipment is recommended to have 1½ gallon per minute output and 2000 psi pressure capability, using a wide fan tip of 0.027" to 0.039".

Other Surfaces

1. Single-ply Roofing such as EPDM and others can follow same warranty coverage and application steps per above, but may require special primer for adhesion. Contact manufacturer for recommendation.

2. Tar & Gravel Roofing must have all loose gravel removed. Surface must be power washed to remove dirt, dust, and foreign contaminants. A clay-emulsion (Liquid-Seal) can then be squeegee/roller applied at 4-6 gallons per 100 sq. ft., embedding polyester mesh, overlapping 2 inches at edge, into the wet emulsion. Allow this process to either stand in the weather for 1-2 weeks, or rinse off with low pressure to remove any surfactants on the surface. Then the Acry-Chem can be applied over this reinforced filler at the required warranty requirements.



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