

ACRYCLAD

ADVANCED ACRYLIC EMULSION COATING

Technical Data & Application Instructions

PRODUCT DESCRIPTION

ACRYCLAD is an advanced acrylic emulsion coating with excellent adhesion to a variety of surfaces, as well as extreme ultraviolet resistance for long term weather exposure applications. ACRYCLAD possesses a satin sheen that is aesthetically attractive as well as functional in releasing dirt and pollution from the coated surface. The flexibility inherent in ACRYCLAD allows for durable performance in all types of weather exposure situations.

BASIC USES

ACRYCLAD was developed as a protective finish for interior or exterior exposure on a variety of surfaces including wood, hardboard siding, concrete, masonry, plaster, galvanized metal, aluminum, steel and existing painted surfaces. ACRYCLAD can also be used on primed wood surfaces and primed metal surfaces.

ACRYCLAD exhibits excellent abrasion resistance and can also be used on properly prepared horizontal substrates. A fine silica aggregate is recommended for those applications requiring non-skid texture. This aggregate mixture also provides an aesthetically pleasing wall dressing that effectively evens out texture variations on vertical substrates.

COLORS

ACRYCLAD is available in standard white and selected tint bases. UNITED has the color tinting facilities to custom match virtually any color, from pastels to accent colors. Color chips or samples must be furnished to UNITED for all custom colors.

PHYSICAL PROPERTIES

- Solids by Weight:**
60% ($\pm 2\%$) [ASTM D2369]
- Solids by Volume:**
45% ($\pm 2\%$) [ASTM D2697]
- Weight per Gallon:**
11.6 lbs ($\pm .5$) [ASTM D1475]
- Pencil Hardness:**
1 H pencil [ASTM D3363]
- Flexibility:**
Passes $\frac{1}{8}$ " mandrel bend to -5°F
- Taber Abrasion Index:**
210 mg. loss w/CS-17 wheels
[ASTM D4060]
- Dry Time to Touch:**
30 minutes [ASTM D1640]
- Dry Time to Recoat:**
1 hour @ 70°F , 50% R.H.
[ASTM D1640]
- Cure Time:**
24 hours @ 70°F , 50% R.H.
[ASTM D1640]
- Gloss:**
5 (60° Gardner) [ASTM D523]

ADVANTAGES

- High performance protection for both interior and exterior exposure.
- Single-package, waterborne system for ease of application.
- Rich acrylic formulation designed for maximum ultraviolet and weather resistance.
- Bonds tenaciously to concrete, masonry, wood, galvanized metal and primed metal surfaces.
- No toxic odor or objectionable smell.
- Conforms to all Federal and State air pollution standards.
- Cleanup is easily accomplished with warm, soapy water.
- Color selection is virtually unlimited.
- Low temperature cure to 40°F (4°C)
- Ultra low VOC (<50 g/l)
- Superior crack bridging capability

SURFACE PREPARATION

Bare wood and metal surfaces must be clean and dry, with any rust or loose paint removed. Prime with **Primer 708** or **Acrylex 400** applied at the recommended coverage rate of 250 to 300 sq. ft. per gallon (6.1 to 7.3 m²/l). **Primer 708** will provide adhesion to bare wood and concrete surfaces, while **Acrylex 400** will provide stain blocking on bare wood and corrosion resistance over metal.

Weathered galvanized metal and previously painted surfaces require a thorough power washing to remove dust, dirt, debris and loose paint prior to the application of **ACRYCLAD**. Bare concrete, brick, stucco or masonry must be structurally sound, clean, dry, fully cured and free from dust, curing agents or form release agents, efflorescence, scale or other foreign materials. On newly poured-in-place concrete, use a non-staining form release agent that is either easily removed or is designed to be compatible with surface coatings. **ACRYCLAD** may be applied directly to clean, sound surfaces of concrete, brick or stucco.

Prior to application over vertical masonry block, a quality acrylic block filler must be used to fill the pores and achieve a pinhole-free surface. Application of a block filler will maximize the effectiveness of the **ACRYCLAD** topcoat.

The amount of block filler required to uniformly fill or surface a masonry block or other porous substrate will depend upon the texture and porosity of the surface.

PREVIOUSLY PAINTED SURFACES: All dust, dirt, efflorescence and loosely adhering paint or coating shall be removed. Paint that shows failure due to alkalis and moisture, which is recognizable by flaking, peeling and white deposits, should be completely removed. Chalky or oxidized surfaces must be washed with **United Cleaning Concentrate (UCC)** or equal, and thoroughly power rinsed with clean, fresh water prior to application of **ACRYCLAD**. **UCC** is a 100% biodegradable cleaner formulated with wetting agents and surfactants. It is non-toxic, non-polluting and will not harm ground vegetation, septic tanks or sewer systems. **UCC** should be diluted at a 10 to 1 ratio with water.

The diluted cleaning solution is then applied to the substrate at 150 to 200 sq. ft. per gallon and allowed to stand for a minimum of 15 minutes. The cleaning solution is then rinsed from the surface with water under high pressure, utilizing either conventional spray or pressure washing equipment. A sample application of **ACRYCLAD** should then be applied to confirm adequate adhesion. If test indicates poor or marginal adhesion, surfaces shall be primed with **UNITED'S Primer 708** at 300 to 400 sq. ft. per gallon (7.3 to 9.8 m²/l).

APPLICATION

ACRYCLAD may be applied by brush, roller or airless spray. Any airless spray equipment capable of 2000 psi (13,790 kPa) and ½ gallon per minute (1.9 l/minute) delivery can be used for applying **ACRYCLAD**. A reversible self-cleaning spray tip with orifice size of .013" to .019" (.33 to .48 mm) and a minimum 40 degree fan angle is recommended. For optimum long-term performance, **ACRYCLAD** should be back-rolled on applications using airless spray.

ACRYCLAD applied at the rate of one gallon per 100 sq. ft. will theoretically yield 7.2 dry mils (183 microns). **ACRYCLAD** should be applied in two separate coats at 250 to 350 sq. ft. per gallon (7.3 to 9.8 m²/l) per coat. Coverage rates will vary with surface texture, surface porosity and method of application. Darker colors may require additional coats for full color uniformity. Coats should be applied in alternating directions or by cross-hatch method to assure even coverage and texture. All tools and equipment can easily be cleaned with warm, soapy water.

PACKAGING AND MIXING

ACRYCLAD is a single package material available in 1-gallon (3.8 liter) cans, 5-gallon (19 liter) pails and 55-gallon (209 liter) drums. **ACRYCLAD** should be thoroughly mixed prior to application. Use of a power mixer with a blade capable of uniformly mixing the entire container is recommended.

LIMITATIONS & PRECAUTIONS

ACRYCLAD requires complete evaporation of water to cure. Cool temperatures and high humidity retard cure. Do not apply during or before weather conditions such as rain, fog or freezing temperatures.

Do not apply **ACRYCLAD** at temperatures below 50°F or when there is a possibility of temperatures falling below 32°F within a 24 hour period. **ACRYCLAD** will freeze and become unusable at temperatures below 32°F. Do not ship or store unless protection from freezing is available. For additional information, refer to OSHA guidelines and **ACRYCLAD** Material Safety Data Sheet.



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