

Technical Data Sheet

IB Acrylic HT Coating

Premium High Tensile Acrylic Coating

IB Roof Systems®

Product Description



IB Acrylic HT is a premium performance, plasticizer free, single component, water-based, 100% acrylic, elastomeric coating that is designed to help reduce surface temperatures thereby minimizing thermal expansion and contraction while providing exceptional resistance to UV degradation and long lasting and preventative solutions for the renewal and maintenance of many roof types.

Packaging

5-Gallon Pail, 55 Gallon Drums & 275 Gallon Tote

Features and Benefits

- Plasticizer free
- 55% solids by volume
- Excellent adhesion to a variety of substrates
- Highest tensile and elongation properties for extremely durable and exceptional resistance to weathering
- Special biocide formulation helps retard discoloration and dirt retention
- Unique formulation allows breathable film while providing a watertight membrane and permitting trapped moisture to escape
- Low VOC, less than 50 grams/liter
- Colors: Gray, Tan, or White

Product Use

IB Acrylic HT is a versatile, premium quality elastomeric coating designed to provide a weathering surface over metal panel roofs, primed smooth and granule asphaltic roofs, concrete, aged EPDM, and aged thermoplastic single-ply membranes.

Approvals

- Meets ASTM D6083
- UL Class A Fire Classification per UL790/ASTM E108
- CRRC Listed
- California Energy Commission Title 24 Compliant (Table 110.8 C)
- Meets California SCAQMD requirements for VOCs
- Florida Building Code Product Approval

Ordering Information

IB Acrylic HT Coating

Item Code	Description	Size	Class
9-AHTG	IB Acrylic HT Gray	5-gal	55
9-AHTT	IB Acrylic HT Tan	5-gal	55
9-AHTW	IB Acrylic HT White	5-gal	55
9-ATHG55	IB Acrylic HT Gray	55-gal	55
9-ATHT55	IB Acrylic HT Tan	55-gal	55
9-ATHW55	IB Acrylic HT White	55-gal	55
9-ATHG275	IB Acrylic HT Gray	275-gal	55
9-ATHT275	IB Acrylic HT Tan	275-gal	55
9-ATHW275	IB Acrylic HT White	275-gal	55

Coverage Rate (approximate)

Approximate coverage rate is 1.0 to 1.75 gallons per 100 square feet (16-28 wet mils) per pass depending on substrate type and roughness.

Yield (1 gal/100 sq. ft.) = 16 wet mils/8.8 dry mils.

See recommendations for specific applications. Yields will vary depending upon system selected and the smoothness and absorbency of substrate.

CRRC # 0640-0006			IB Acrylic HT			
Solar Reflectance / Thermal Emittance / SRI Values						
Color	Solar Reflectance (C1549)		Thermal Emittance (C1371)		SRI Value (E1980)	
White	Initial	3-Year Aged	Initial	3-Year Aged	Initial	3-Year Aged
	0.87	0.83	0.89	0.89	109	105

Physical Properties

Property	Test Method	Typical Value
% Solids by Volume	D2697	55% ± 2%
% Solids by Weight	D1644	65% ± 2%
Viscosity	D562	110 ± 10 KU
Elongation	D2370	600% (initial) 240% (aged)
Tensile Strength	D2370	500 psi (initial) >500 psi (aged)
Tear Resistance	D624	133 ± 3 psi
Low Temperature Flexibility, ½" mandrel, 1000 hours weathering	D522	Pass @ -15°F (-26.1°C)
Permeance	D1653	14 ± 3
Hardness (Shore A)	D2240	50-55
Weight per Gallon	-	12.1 lbs./gal
VOC Content	EPA M24	<50 g/L
Fungi Resistance	-	Zero Rating
Water Swell	-	7.3%
Dry Time (24 wet mils @ 75°F (25°C))	-	90 minutes @ 50% humidity
Recoat Window	-	6-24 hours to recoat
Cure Time	-	30 days
Shelf Life: (unopened container stored at temperatures between 60°F and 90°F.	-	24 months from date of manufacture.

Temperature Precautions

Do not apply this product below 50°F (10°C) or in weather conditions where the temperature will drop below 40°F (4.4°C) during the curing cycle. Upper temperature restriction (both air and substrate) for application of IB Coating products is 120°F (49°C). If the substrate temperature exceeds 120°F (49°C), IB Coating products should be applied during cooler periods of the day. No coating should be applied unless surface temperature is 50°F (10°C) minimum and 120°F (49°C) maximum.

Relative Humidity Precautions

Acrylic products are moisture sensitive. Do not apply this product when it is raining or if the threat of rain exists. Do not apply when the dew point is less than 5°F below the ambient temperature. Do not apply in conditions when the relative humidity exceeds 90%.

Storage

Always store in cool and dry location. For best results, keep product stored above 60°F (15.6°C) or below 90°F (32°C). Do not store in direct sunlight or in temperatures. Keep from freezing. Allow material to set at room temperature for 24 hours prior to use.

Application Guidelines

Application Equipment

Airless Sprayer:

- **Output:** Minimum 30:1 fluid to air ratio / 2.5 – 3.0 gal per minute
- **Pressure:** 3,000 to 4,000 psi
- **Filter Screen:** 30 mesh or larger
- **Spray Gun:** Contractor rated for pressure, equipped with a ball-bearing swivel for ease of handling.
- **Hoses:** 3/8" min ID up to 75 ft., 1/2" min ID up to 200 ft., and 3/4" min ID over 200 ft. Use largest diameter at pump. Hoses rated to 2X maximum pump pressure. Hose lining should be compatible with coating and required cleaning materials.
- **Gun Hose:** 3/8" ID x 6 feet high pressure rated with adequate WPSI.
- **Extension:** 12" gun extension is recommended
- **Orifice Tip:** .027" to .039" diameter, wide angled fan angle of 40 to 50 degrees is recommended. A reversible self-cleaning type of nozzle is also recommended. Exact orifice size will vary with temperature of the material and ambient temperatures.

Brush: No reduction necessary. Use synthetic filament brushes. Do not over-brush as material may start to pull.

Roller: No reduction necessary. Use 1-1/4" nap synthetic rollers. Keep a wet edge to avoid pulling. Avoid rapid rolling which can cause bubbling.

Spraying: When spraying material should be at least 75°F (25°C). Before applying additional coat, the previous coat must be completely dry and cured.

Mixing

No thinning or reduction is necessary. Product may separate after shipping and storage, though it may still appear mixed. When mixing is necessary, use a ¾ horsepower or larger electric or air operated mixer with a blade capable of uniformly mixing container. Use a 3" minimum diameter mixing blade for 5-gal pails and a minimum 6" minimum diameter blade for drums. **Never mix by hand.**

Surface Preparation

The substrate must be free of areas of ponding water, ice, snow, rain or dew, dirt, dust, grease, oil, loose granules, gravel, peeling coating and other foreign contaminants, or other debris that would inhibit adhesion of coating. If such conditions exist, the roof surfaces should be properly prepared and cleaned using the specified IB cleaning solution in order to receive the new coating system.

Mildew must be removed by power washing and scrubbing with a bleach solution of 1 part bleach and 2 parts water. Repeat if necessary. Rinse thoroughly and allow to dry.

Most substrates require a bond enhancing primer and/or a compatible base coat before applying the IB Acrylic HT Coating. Contact IBRS Technical Department at 800-426-1626 for recommendations regarding specific applications.

Application

Adhesion Test: Adhesion of the IB Acrylic HT Coating should always be checked. Apply 6" – 12" square of the coating and embed a piece of 1" wide IB Fabric into the coating, leaving a minimum 2" tail of the fabric exposed. Allow 2-3 days for the coating to cure and perform a 90° pull test of the fabric tail to test adhesion of the coating to the substrate.

Coating: Apply IB Acrylic HT Coating over the properly prepared substrate, compatible base coat or primer at the rate of 1.0 - 1.75 gallons (3.78 – 6.62 L) per 100 square feet (16 – 28 wet mils) or at the rate of 2.0 – 4.0 gallons (7.56 – 15.12 L) per 100 square feet (32 – 64 wet mils) in two to three passes of 1.0 – 1.5 gallons (3.78 – 5.67 L) per 100 square feet (16 – 24 wet mils) per pass. Do not exceed 1.75 gallons (6.62 L) per 100 square feet in a single pass. **Do not use as a base coat over asphaltic surfaces or EPDM membranes.**

When applying in separate applications, apply at right angles to the previous coat. Coating must be evenly applied and pinhole-free. Before applying additional coat, the previous coat must be completely dry and cured. If any contamination is present on the cured surface, it must be washed and completely dry before application of subsequent coats.

Limitations

- Refer to Substrate Preparation guidelines for proper preparation, cleaning and primer roof with any applicable bond enhancing primer before commencing with application of IB Acrylic Coatings.
- This product cures by water evaporation only. Do not attempt to apply product when weather conditions are not conducive to drying. Refer to temperature and relative humidity precautions.
- Application of materials with power spray equipment will require some masking and erection of wind screens to prevent over spray occurrences and damage to surrounding structures, surfaces, vehicles, property, or persons.

Clean Up

Clean up spills and splatters immediately with water. Flush all hoses, equipment, and tools with water followed by propylene glycol to prevent unit from rusting.

Disposal

Empty containers must be disposed of in an approved landfill in accordance with local, state, and federal regulations.

Caution

Avoid prolonged and repeated contact with skin. Do not take internally. Avoid eye contact as this material has adhesive properties. Refer to product Safety Data Sheet (SDS) for additional information pertaining to this product and prior to use or handling.

Disclaimer

All values given are approximate and are subject to change without notice. There is no implied or express warranty given through these values or statements, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by "in-house" and independent "third party" evaluation for the purpose of classification and or approval. Acceptance, purchase, and selection of these products are the sole responsibility of the buyer or buyer's representative. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product only.

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