

Product Description



IB Silicone Coating is a high performance, high solids, single component, moisture cure fluid applied silicone 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

- Ponding water resistant
- 95% solids by volume
- Excellent adhesion to a variety of substrates
- Excellent sag resistance
- Low VOC, less than 50 grams/liter
- Colors: Gray or White

Product Use

IB Silicone Coating is 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. Some substrates require a primer (refer to surface preparation requirements).

Approvals

- 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 Silicone Coating

Item Code	Description	Size	Class
9-SILCG5	IB Silicone Coating Gray	5-gal	55
9-SILCW5	IB Silicone Coating White	5-gal	55
9-SILCG55	IB Silicone Coating Gray	55-gal	55
9-SILCW55	IB Silicone Coating White	55-gal	55
9-SILCG275	IB Silicone Coating Gray	275-gal	55
9-SILCW275	IB Silicone Coating White	275-gal	55

Coverage Rate (approximate)

Approximate coverage rate is 1.25 to 3.0 gallons per 100 square feet (18-48 wet mils) per pass depending on substrate type and roughness.

Yield (1 gal/100 sq. ft.) = 16 wet mils/15 dry mils.

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

Storage

Always store in cool and dry location. For best results, keep product stored above 40°F (4°C) or below 90°F (32°C). Do not store in direct sunlight or in temperatures 90°F (32°C). Allow material to set at room temperature for 24 hours prior to use.

IB Silicone Coating					
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	0.81	0.89	0.88	110
					101

Physical Properties		
Property	Test Method	Typical Value
% Solids by Volume	D2697	80% ± 2%
% Solids by Weight	D1644	96% ± 2%
Elongation at Break @ 73°F	D2370	196%
Elongation at Break @ 0°F		196%
Tensile Strength @ 73°F	D2370	275 psi
Tensile Strength @ 0°F		275 psi
Tear Resistance, Die C lb./in	D624	24
Weathering/UV Resistance	D6694	Pass, 5000 hours
Permeance, @ 30 mils	E96 Procedure B	Perms 6.4
Weight per Gallon	-	10.6 lbs./gal
VOC Content	EPA M24	<50 g/L
Service Temperature		185°F (85°C)
Tack Time @ 75°F (25°C)	-	2-3 hours @ 55% humidity;
Dry Free @ 75°F (25°C)	-	6-8 hours @ 55% humidity
Recoat Window	-	24-48 hours to recoat
Cure Time	-	48 hours
Shelf Life: (unopened container stored at temperatures between 60°F and 90°F.	-	12 months from date of manufacture.

Temperature Precautions

Temperatures affect viscosity, pumping and flow characteristics of the IB Silicone. Heat increases and cold decreases the flow-ability. Do not apply this product below 40°F (4°C) or in weather conditions where the temperature will drop below 32°F (0°C) during the curing cycle. For best results, apply when the temperatures are above 40°F (4°C) and material is stored above 65°F (18°C). Do not apply this product below freezing 32°F (0°C). Upper temperature restriction (both air and substrate) for application of IB Silicone Coating products is 120°F (49°C). If the substrate temperature exceeds 120°F (49°C), IB Silicone Coating should be applied during cooler periods of the day. No product should be applied unless surface temperature is above 50°F (10°C) minimum and 120°F (49°C) maximum.

Relative Humidity Precautions

Although silicone products are moisture curing, for best results do not apply this product when it is raining, if the threat of rain exists, or dew is likely to occur before product dries. Do not apply it when the dew point is less than 5°F below the ambient temperature. Do not apply in conditions when the relative humidity exceeds 90%.

Application Guidelines

Application Equipment

- **Output:** Minimum 3.0 gal per minute
- **Pressure:** Minimum 6,500 psi high-pressure airless pump
- **Transfer Pump:** 5:1 transfer pump to prevent cavitation
- **Spray Gun:** Contractor rated for pressure (7000 psi), equipped with a ball-bearing swivel for ease of handling.
- **Hoses:** 3/4" min ID minimum up to 75 ft., 1" min ID up to 200 ft., and 1-1/2" min ID over 200 ft. Use largest diameter at pump. Hoses rated to 2X maximum pump pressure. Hose lining should be BUNA-N jacketed to prevent moisture contamination. Do not use a hose that has been used for Acrylics. The liner will absorb moisture and start the silicone cure process.
- **Orifice Tip:** .030" - .50" diameter, wide angled fan angle of 40 to 50 degrees is recommended. A reversible self-cleaning type 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 50°F (10°C).

Mixing

No thinning or reduction is necessary. Product may separate after storage over 6 months, 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 it to dry.

Most substrates require a compatible primer to be applied prior to the application of the coating. Contact IBRS Technical Department at 800-426-1626 for recommendations regarding specific applications.

Application

Adhesion Test: Adhesion of the IB Silicone 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 Silicone Coating over the properly prepared substrate or compatible base coat at the rate of 1.25 to 3.0 gallons (4.73 – 11.36 L) per 100 square feet (18 - 48 wet mils) after the primer or base coat has cured. 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. **Note:** Do not use as a base coat over asphaltic surfaces.

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 Silicone Coatings.
- IB does not recommend and is ineligible for IB Coating Warranty if non-white silicone coatings are installed over asphalt substrates.
- 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 overspray occurrences and damage to surrounding structures, surfaces, vehicles, property, or persons.

Clean Up

Clean spray equipment containing uncured material by flushing with VM&P, Naphtha, or mineral spirits. IB Silicone Coating cures by reaction with moisture. **DO NOT USE WATER OR RELAINED SOLVENTS.** Do not leave material in spray guns, pump equipment, and/or hoses for prolonged periods unless equipment contains moisture lock hoses, fittings, and seals. Without these, material will cure on hose walls and at unsealed connections possibly causing an increase in operating pressure and material flow restriction.

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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