

Technical Data Sheet

IB Silicone FG

Fibred Silicone Flashing Grade

IB Roof Systems®

Product Description



IB Silicone FG is a high performance, high-solids, moisture curing, fibred silicone flashing grade mastic that is designed to seal all seams and address angle changes and irregularly shaped penetration flashings on roofs in conjunction with IB Silicone systems.

Packaging

2-Gallon Pail

Features and Benefits

- Excellent adhesion to a variety of substrates
- Remains flexible even under ponding water
- UV stable
- Excellent chemical resistance
- In most cases, eliminates need for 3 course application of fabric reinforcement of seams and flashings.
- Low VOC compliant
- Colors: White or Gray

Product Use

IB Silicone FG is used as a flashing material for most substrates and as a sealant on seams, and penetrations in lieu of 3 course application and is compatible with IB Silicone coatings. May be used as a pitch pan filler on IB Silicone coating projects. Can be applied over most substrate types.

Approvals

- Meets California SCAQMD requirements for VOCs

Ordering Information

IB Silicone FG

Item Code	Description	Size	Class
9-SILFGG2	IB Silicone FG Gray	2-gal	55
9-SILFGW2	IB Silicone FG White	2-gal	55

Coverage Rate (approximate)

Approximate coverage rate is 4 gallons per 100 square feet (64 wet mils) @ an approximate thickness of 1/16" per pass depending on substrate type and roughness. For 3-coursing applications, two passes at 4.0 per 100 square feet (64 wet mils) per pass are needed.

Approximate coverage for 2" seam is 100 - 150 lineal feet per gallon per pass. Yield (1 gal/100 sq. ft.) = 16 wet mils/11 dry mils.

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

Temperature Precautions

Temperatures affect viscosity, pumping and flow characteristics of the IB Silicone FG. Heat increases and cold decreases the flow-ability. 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). May be applied to damp surfaces and is rain tolerant during cure. Upper temperature restriction (both air and substrate) for application of Silicone FG is 120°F (49°C). If the substrate temperature exceeds 120°F (49°C), IB Silicone FG 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.

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.

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Physical Properties

Property	Test Method	Typical Value
% Solids by Volume	D4041	68% ± 2%
% Solids by Weight	D4041	81% ± 2%
Elongation	D412	200%
Tensile Strength	D412	184 psi (initial)
Tear Resistance	D624 Die C	32 pli
Weathering/UV Resistance	D6694	Pass 5000 hours
Hardness Shore A	D2240	55
Weight per Gallon	-	10.4 lbs./gal
VOC Content	EPA M24	<250 g/L
Service Temperature	-	185°F (85°C)
Dry Time @ 75°F (25°C)	-	6-8 hours @ 55% humidity
Tack Free @ 75°F (25°C)	-	4 hours @ 55% humidity
Recoat Window	-	9-12 hours to recoat
Cure Time	-	40 hours
Shelf Life: (unopened container stored at temperatures between 40°F and 75°F.	-	18 months from date of manufacture.

Application Guidelines

Application Equipment

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

Trowel: No reduction necessary. Use straight edge or notched trowel. Do not over-trowel as material may start to pull.

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 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.

Verify that all drains, fasteners, flashings, penetrations, perimeter edges, seams, scuppers, and other areas of intended application are secure and watertight. Note: Any condition that is not secure or watertight will require a 3-course application of IB Silicone FG and IB Fabric. Fabric reinforcement may be added as needed at angle changes, or for flashing irregularly shaped penetrations or when repairing cracks more than ¼" (6.4 mm) in diameter and all cracks that are subject to movement.

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Adhesion Test: Adhesion of the IB Silicone FG 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.

Primer: In most cases, primer should not be necessary. When primer is necessary use compatible primer for applicable substrate.

Seams: Seal all field seams and flashings by applying IB Silicone FG at the rate of 7.8 gallons per 100 sq. ft. (125 wet mils) over the seam and feather in with a chip brush or trowel to an approximate width of 3 - 4" wide. Seal all penetrations etc. by applying IB Silicone FG in a 2" wide bead over the seam and feather in with a chip brush or trowel to an approximate width of 3 - 4" wide. Achieve a smooth 85 dry mil application over the treatment area. Allow to dry for least 24 hours before proceeding with coating application.

Drying: Allow to dry for least 24 hours before proceeding with coating application.

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.
- 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 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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