## Technical Data Sheet

# **IB Seam Set FG**

Moisture Cure Flashing Grade & Seam Sealant

**Product Description** 



**IB** Seam Set FG is a high quality, single component, flashing grade moisture-cure polyurethane roof sealant that is designed to seal joints, seams and address angle changes and irregularly shaped penetration flashings on roofs in conjunction with IB Silicone or Urethane coatings.

### **Packaging**

2.5 & 5-Gallon Pail

#### **Features and Benefits**

- Excellent adhesion to a variety of substrates
- Can be pumped and extruded for faster application
- UV stable
- Excellent chemical resistance
- In most cases, eliminates need for 3 course application of fabric reinforcement of seams and flashings.
- Excellent sealant for metal gutters
- Low VOC compliant
- Color: Gray

#### **Product Use**

**IB Seam Set 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 and IB Urethane coatings. May be used as a pitch pan filler on IB Urethane coating projects. Can be applied over most substrate types.

Ordering Information

| IB Seam Set FG |                     |         |       |  |
|----------------|---------------------|---------|-------|--|
| Item Code      | Description         | Size    | Class |  |
| 9-SSFGG25      | IB Seam Set FG Gray | 2.5-gal | 55    |  |
| 9-SSFGG5       | IB Seam Set FG Gray | 5-gal   | 55    |  |

# **Coverage Rate (approximate)**

Approximate coverage rate is 3.5 gallons per 100 square feet (56 wet mils) @ an approximate thickness of 1/16" depending on substrate type and roughness. For 3-coursing applications, two passes at 3.5 per 100 square feet (56 wet mils) per pass are needed.

Yield (3.5 gal/100 sq. ft.) = 56 wet mils/45 dry mils.

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

## **Temperature Precautions**

When temperatures fall below  $60^{\circ}F$  ( $15.6^{\circ}C$ ), IB Seam Set FG can best be applied after storage at  $70^{\circ}F$  for a minimum of 48 hours prior to usage. For ease of application, material temperature should be  $60^{\circ}F$  ( $15.6^{\circ}C$ ) minimum. If IB Seam Set FG is to be pumped at temperatures below  $60^{\circ}F$  ( $15.6^{\circ}C$ ) insulated or heated hoses may be required. Do not apply this product below freezing  $40^{\circ}F$  ( $4^{\circ}C$ ). Upper temperature restriction (both air and substrate) for application of Seam Set FG is  $120^{\circ}F$  ( $49^{\circ}C$ ). If the substrate temperature exceeds  $120^{\circ}F$  ( $49^{\circ}C$ ), IB Seam Set FG should be applied during cooler periods of the day. No product should be applied unless surface temperature is above  $50^{\circ}F$  ( $10^{\circ}C$ ) minimum and  $120^{\circ}F$  ( $49^{\circ}C$ ) maximum. The service temperature range is  $-65^{\circ}F$  ( $-54^{\circ}C$ ) to  $180^{\circ}F$  ( $82^{\circ}C$ ). The substrate temperature range for application is  $40^{\circ}F$  ( $4^{\circ}C$ ) –  $120^{\circ}F$  ( $49^{\circ}C$ ).

#### Storage

Always store in cool and dry location. For best results, keep product stored above 60°F (15°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 48 hours prior to use.

| IB Roo | of System | S® |
|--------|-----------|----|
|--------|-----------|----|

| IB Seam Set FG                  |             |                    |  |  |  |
|---------------------------------|-------------|--------------------|--|--|--|
| Physical Properties             |             |                    |  |  |  |
| Property                        | Test        | Typical Value      |  |  |  |
|                                 | Method      |                    |  |  |  |
| % Solids by Volume              | D2697       | 80% ± 2%           |  |  |  |
| Viscosity                       | -           | 120,000-160,000    |  |  |  |
|                                 |             | cps                |  |  |  |
| Ultimate Elongation             | D412        | 400%               |  |  |  |
| Tensile Strength                | D412        | 325 psi ± 25       |  |  |  |
| Weathering/UV Resistance        | D822        | Pass               |  |  |  |
| Chemical Resistance             | -           | Excellent          |  |  |  |
| Permeance, @ 30 mils            | E96         | Perms 1.2          |  |  |  |
| _                               | Procedure B |                    |  |  |  |
| Weight per Gallon               | -           | 7.4 lbs./gal       |  |  |  |
| VOC Content                     | EPA M24     | 186.9 g/L          |  |  |  |
| Shore A Hardness                | D2240       | 40                 |  |  |  |
| Low Temp Flexibility            | D412        | -60°F              |  |  |  |
| Flash Point                     |             | 109.9° F (43.3° C) |  |  |  |
| Shelf Life: (unopened container | -           | 12 months from     |  |  |  |
| stored at temperatures between  |             | date of            |  |  |  |
| 60°F and 90°F.                  |             | manufacture.       |  |  |  |

# **Application Guidelines**

## **Application Equipment**

- Output: Minimum 2.0 gal per minute
- Pressure: Minimum 3,000 psi high-pressure airless pump
- Transfer Pump: Ability to pump Seam Set FG is typically related to the inlet plumbing to the pump. An unrestricted 1 1/2" inlet works well.
   To reduce the pressure required at the pump, a 3/4" high pressure hose or greater should be utilized.
- Extrusion: To extrude the Seam Set FG, the gun is either removed or fitted with a wand without a tip and potentially with a flanged end to deliver a bead ¾ to 1" wide.

**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 3⁄4 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.

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IB Roof Systems®

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 Seam Set 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 ½" (6.4 mm) in diameter and all cracks that are subject to movement.

# **Application**

**Adhesion Test:** Adhesion of the IB Seam Set 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 Seam Set FG at the rate of 3.5 gallons per 100 sq. ft. (56 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 Seam Set FG in a 2" wide bead over the seam and feather in with a chip brush or trowel to an approximate width of 3" wide.

Note any condition that is not secure or watertight will require a 3-course application of IB Seam Set FG and 6" wide IB Fabric centered over the seam/joint with (three-inch exposure +/- ½ inch on each side). Embed the fabric in a 56 wet mil application of IB Seam Set FG making certain all wrinkles are rolled out of the fabric. Cover embedded fabric in a second coating of IB Seam Set FG in a 56 wet mil application. Allow to dry for least 24 hours before proceeding with coating application. Achieve 85 dry mils minimum when using fabric.

**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 or IB Urethane 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 requiring 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 Acetone, IB Seat Set FG cures by reaction with moisture. DO NOT USE WATER OR RELAIMED 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

This primer is not intended for non-industrial use. The solvents used in this product are flammable and, in some cases, irritating to the eyes and skin. Keep containers tightly closed and away from heat, sparks, and open flame.

IB Seam Set FG contains chemically active polyurethane resin that reacts with water, alcohols, and amines. Avoid breathing vapors and contact with skin. Use appropriate chemical cartridge or air-supplied respirators where limited air movement might occur. In confined areas, adequate ventilation or fresh air supplied hoods must be provided during application. Avoid prolonged and repeated contact with skin. Do not take internally. Avoid eye contact as this material has adhesive properties. Wear appropriate protective clothing for the skin. Refer to product Safety Data Sheet (SDS) for additional information pertaining to this product and prior to use or handling. Keep out of reach of children. If swallowed, DO NOT induce vomiting. Drink 1 to 2 glasses of water. Call a physician immediately.

### **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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