

## Technical Data Sheet: IB 50 mil Fleece Back ChemGuard Single-Ply



**Product Description:** IB 50 mil Fleece Back ChemGuard™ Single-Ply is an ASTM D 4434-04, Type III polyester-scrim fabric reinforced, compounded resin based sheet with plasticizers, stabilizers, fillers, pigments and other proprietary materials, manufactured in a nominal 50 mil thickness, in 72" wide-by-90-foot (540 sq.ft.) rolls and 36" rolls. IB 50 mil Fleece Back ChemGuard Single-Ply uses an anti-wicking polyester scrim for added strength and tear resistance that also minimizes moisture intrusion between the sheet's top film and bottom film layers. The bottom has an adhered polyester Fleece backing for enhanced adhesive performance.

**Packaging:** 540 sq. ft. rolls, weight: 190 lbs. / roll

### Advantages:

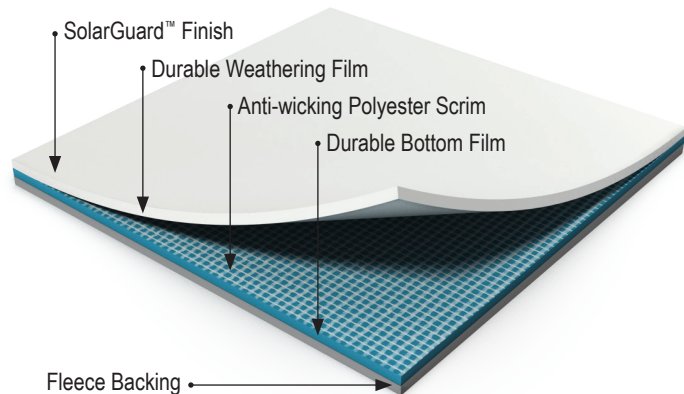
- IB 50 mil. Fleece Back ChemGuard Single-Ply is an ASTM D 4434-04, Type III Thermoplastic Membrane
- 15-Year Material Warranty
- Excellent flexibility in all climates
- IB 50 mil Fleece Back ChemGuard Single-Ply is a specially designed chemical resistant CPA membrane that was developed specifically for industrial and restaurant applications
- The highly reflective IB Fleece Back ChemGuard Single-Ply with SolarGuard™ finish helps to reduce temperatures of a building's interior (when used with a well designed roofing system)
- 56% thicker top film (above the scrim) layer versus other single-ply membranes
- Thermally welded seams provide superior seam strength
- Exceeds Energy Star™ and California Title 24 requirements for Solar Reflectance and Emissivity
- 3.5 oz. Fleece backing for enhanced adhesive performance

**Use:** IB 50 mil Fleece Back ChemGuard Single-Ply can be installed in new, recover, and re-roof constructions as the primary field membrane, as a stripping ply for flashings, and as a base flashing reinforcement at all roof to wall transitions. IB 50 mil Fleece Back ChemGuard Single-Ply can be fully adhered to a properly prepared substrate (insulation, cover-board, or other pre-approved materials) with approved membrane adhesive or mechanically attached with approved fasteners and membrane plates. Optional attachments are available but need to be pre-approved by IB Technical Services Department. All laps side and end laps are to be thermally welded using a hot air welder with a minimum weld width of 1-1/2".

**Approvals and Listings:** IB 50 mil Fleece Back ChemGuard Single-Ply is listed with various component assemblies at UL and Factory Mutual (F.M. Global) for fire, wind uplift, impact, and chemical resistance. Visit our website for links to these agencies and listings at: [www.ibroof.com](http://www.ibroof.com)

**Warranties:** IB 50 mil Fleece Back ChemGuard Single-Ply has a '15-Year Material Warranty' and is available for 'Warranty Plus' and 'Total System' warranties for qualified IB Roof Systems applicators. Contact IB Roof Systems at (800) 426-1626, or visit our website at: [www.ibroof.com](http://www.ibroof.com)

**Available Colors:** White is standard color.



| Solar Reflectance / Thermal Emittance / Calculated SRI Values |                   |                   |                      |                         |                       |
|---|-------------------|-------------------|----------------------|-------------------------|-----------------------|
| Membrane Color  | Solar Reflectance | Thermal Emittance | SRI Value (Low Wind) | SRI Value (Medium Wind) | SRI Value (High Wind) |
| White   | 0.870             | 0.88              | 108.9                | 109.0                   | 109.1                 |

| Property   | Method     | Requirement       | 50 Mil        |
|--|------------|-------------------|---------------|
| Overall thickness of PVC sheet, min. mm (in.)    | ASTM D751  | 1.14 (0.045)      | 1.27 (0.05)   |
| Thickness over the scrim, min. mm (in.)          |            | 0.40 (0.016)      | 0.635 (0.025) |
| Breaking strength, min. kN/m (lbf/in.)           | ASTM D751  | 35 (200)          | 65 (370)      |
| Elongation at the break, min. %:                 | ASTM D751  |                   |               |
| Machine direction                                |            | 15 <sup>B</sup>   | 40            |
| Cross-machine direction                          |            | 15 <sup>B</sup>   | 38            |
| Retention of properties after heat aging:        |            |                   |               |
| Breaking strength, min. % of original            |            | 90                | 90            |
| Elongation, min. % of original                   |            | 90                | 90            |
| Tearing strength, min. N (lbf)                   | ASTM D751  | 200 (45.0)        | 200 (45.0)    |
| Low temperature bend                             | ASTM D2136 | Pass              | Pass          |
| Accelerated weathering test:                     | ASTM G53   |                   |               |
| Cracking (7x magnification)                      |            | None              | None          |
| Crazing (7x magnification)                       |            | None              | None          |
| Linear dimension change, max %                   | ASTM D1204 | 0.5               | 0.5           |
| Change in weight after immersion in water, max % | ASTM D570  | +/- 3.0           | 1.5           |
| Static puncture resistance                       | ASTM D5602 | Pass              | Pass          |
| Dynamic puncture resistance                      | ASTM 5636  | Pass <sup>C</sup> | Pass          |

A: Above the cross points of any fabric or fiber and the surface exposed to the weather.  
 B: For reinforcing fabric only; elongation of PVC material shall be the same as Type II, Grade 1.  
 C: For Type II, Grade 1 products, dynamic puncture shall be evaluated at an energy level to 10 J min. For Type II, Grade 2 and Type III products, dynamic puncture shall be evaluated at an energy level of 20 J min.