

## Saflex™ Structural PVB interlayer



High-performance laminate designed for strength

Saflex™ Structural interlayer is a tough polyvinyl butyral interlayer (PVB) designed for applications where interlayer rigidity and high glass adhesion requirements are not met with standard glazing interlayers. Saflex Structural provides superior structural capacity compared with standard PVB interlayers. In properly designed systems, Saflex Structural is capable of keeping glass intact at high and low temperatures after impact and under load. It's formulated to provide robust resistance to delamination and excellent edge stability and is compatible with visibly reflective coatings and low-emissivity coatings.

Saflex Structural glazing is suitable for exposed edge laminates, floors, stairs, balconies, canopies, point glazing systems, clip systems, captured systems, curtain walls, and sloped and overhead glazing where glass needs to remain intact after breakage.

Due to the stiffness of Saflex Structural interlayer, laminates can either sustain higher uniform loads with the same glass thickness or the glass thickness can be reduced and still achieve the same loading. Saflex Structural can be used with annealed, heat-strengthened, and fully tempered glass. Glass selection should be based on required performance attributes such as load requirements, optical distortion, potential for spontaneous breakage, thermal stress capability, stress capability, and post-breakage performance such as glass shard retention, viewing, and the ability to withstand limited loads.

#### **Benefits**

- Post-breakage safety Higher load capability to maintain safety after breakage
- Superior edge stability
  Enhances delamination resistance
- Enhanced unit strength Facilitates oversized glass design
- Enhanced interlayer strength Enables thinner glass to reduce weight and cost
- Superwide 3.2 m width
  Improves throughput and reduces costs
- Vanceva<sup>™</sup> Colors compatibility
  Creates thousands of color opportunities



# Do you need to run glass stress calculations?

Visit **saflex.com/tools**, and start using Saflex StructuralPro. The software will perform calculations and provide a PDF report via email detailing:

- Load resistance
- Glass stress
- Deflection for the requested configuration
- Effective thickness for the single-unit laminate from which the model was generated
- Overall thickness and weight of the glass

#### Saflex Structural product offering

Product nomenclature	Thickness	Std. width	Std. length	Transparency	
Saflex DG	0.76 mm (0.030 in.)	45–322 cm	250 m	Clear	

#### Saflex Structural mechanical and physical properties

Technical data	Property	Test method	Units	Test conditions	Saflex Structural interlayer	
Physical	Specific heat	ASTM E1269	J/kg°C	28°-80°C	2150	
	Specific gravity	ASTM D792	g/cm³	_	1.09	
	Hardness	ASTM D2240	Shore D	Cut/stacked to 12.5 mm	52	
Mechanical	Elongation at failure	JIS K6771	%	23°C/50% RH	190	
	Tensile strength	JIS K6771	kg/cm	23°C/50% RH	330	
	Tear strength	ASTM D624	N/mm	23°C/50% RH	106	
	Poisson's ratio	ASTM D638	_	23°C/50% RH	0.476	
Thermal	Coefficient of thermal expansion	ASTM D831	10 <sup>-6</sup> /°C	–18° to 30°C	129 x 10 <sup>-6</sup>	
	Thermal conductivity, K	ASTM F5930	W/m/(m <sup>2</sup> °C)	36°C	0.213	
						DG XC
Solar	Solar transmittance	NFRC 300	D65	Clear 3-mm glass	76%	76%
	Visible transmittance	NFRC 300	D65	Clear 3-mm glass	89%	88%
	UV screening	NFRC 300	280–380 nm	Clear 3-mm glass	>99%	>99%

**Note:** The designed high adhesion may render this product inappropriate for lamination with thin annealed lites of glass when used as a single-layer interlayer where penetration resistance is required. Information regarding the safe handling and storage of Saflex Structural can be found in the safety data sheet that is available from the advanced interlayers sales organization or at **Eastman.com**. The modulus values of Saflex Structural as a function of load duration and temperature are provided in the product technical sheet that can be found on **Saflex.com**.

#### Additional benefits of Saflex laminated glass



Safety protection



**Burglary** protection



Storm protection



**UV** protection



Noise reduction

#### The architectural industry trusts Saflex and Vanceva color PVB interlayers.

Since 1937, glass fabricators have counted on Saflex for high-quality products, reliable service and expert advice to help deliver world-class technology for laminated glass. Eastman architectural glazing products include Saflex PVB interlayers for laminated glass as well as Vanceva color PVB interlayers. Architects and engineers are taking advantage of our products which offer structural performance, over 69,000 colors, acoustic sound reduction and solar UV protection that provide safety, security and weight reduction inherent to the PVB when laminated between two pieces of glass.

### **EASTMAN**

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