

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 load.

#### **Benefits**

- Post-breakage safety
  Higher load capability sustains 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® Colors compatibility
  Creates thousands of color opportunities



# Do you need to run glass stress calculations?

Visit www.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. widths	Std. lengths	Transparency
Saflex® DG	0.76 mm (0.030 in.)	45–322 cm	250 m	Clear

#### Saflex<sup>®</sup> Structural mechanical and physical properties

Technical data	Property	Test method	Units	Test conditions	Saflex <sup>®</sup> Structural interlayer	
	Specific heat	ASTM E1269	J/kg°C	28°-80°C	2150	
Physical	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/(m²°C)	36°C	0.196	
					DG	DG X
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 www.Eastman.com

## Additional benefits of Saflex laminated glass



Safety protection









#### Architects and designers trust Saflex®.

Around the world, architects and designers trust Saflex when performance and safety are their most critical concerns. The reason for their confidence is simple. No matter what the specifications or performance targets, Saflex interlayer technology delivers advanced glazing performance for demanding applications.



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