Architectural safety glass interlayer

SENTRYGLAS® PLUS

For glass that's more than glass

DuPont™ SentryGlas® Plus creates new glazing opportunities by changing the way glass performs and providing new design options for architects and building designers. Tests have proven that SentryGlas® Plus has exceptional residual strength, even when both lites of glass are broken (above photo). This brings greater peace of mind to building owners and occupants in locations that experience typhoons or hurricanes and makes it possible to specify safer laminated glass for point-supported glazing systems, canopies, skylights and railings.

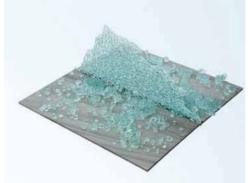
SentryGlas® Plus is an ideal product for complex glazing projects that require increased strength and enhanced appearance. The benefits of SentryGlas® Plus are not only confined to complex projects. Glazing systems that utilize SGP are typically lighter than their PVB counterparts.

This can result in larger panels, reduced number of support fittings and a lighter weight support structure that enhance the visual impact.





12mm Laminated Glass with 0.060 PVB Interlayer



12mm Laminated Glass with 0.060 SGP Interlayer

12mm Tempered Glass



SENTRYGLAS® PLUS

LAMINATED GLASS



Exposed Edges - SentryGlas® outperforms conventional PVB in edge stability testing, making it the ideal choice for exposed exterior edges (canopies, railing glass and point supported walls). With SentryGlas® Plus, edge stability numbers (ESNs) continue to be zero at all known installations, including 7-year test panels exposed to severe heat and humidity.



SentryGlas® Plus is 100 times stiffer and 5 times stronger than traditional interlayers, allowing for thinner make ups with equal or greater strength. In stairs, flooring and overhead glazing, laminated glass made with SentryGlas® Plus performs like engineering materials, with outstanding post-breakage resistance to creep and collapse (far left photo).



Security - SentryGlas® Plus provides prolonged physical attack and burglary resistance with 5 times the tear strength and 100 times the rigidity of conventional PVB Interlayer's. SGP provides greater security from a range of threats than any other traditional laminated glass



Hurricane-Resistance – Because SentryGlas® Plus is stiffer and harder to tear than conventional laminate interlayer's it can withstand greater impacts. In post-breakage wind cycle testing, hurricane glass made with SentryGlas® Plus lasts longer and maintains building protection long after alternative laminated safety glass has failed.



SentryGlas® Plus is available in both a UV transmitting option and as a traditional UV blocking interlayer. Unlike most laminate interlayer technologies, DuPont™ SentryGlas® requires no UV protection for lasting strength and clarity. Therefore, SentryGlas® can be made in a specialty, high-UV transmittance sheet, extremely useful when designing controlled environments for many life species (plants, insects, fish, and reptiles).



Clarity - SentryGlas® Plus structural interlayers are significantly clearer than traditional PVB interlayer's. By combining low-iron glass and SentryGlas[®] Plus interlayers architects and designers can achieve a laminated glass product with near invisibility. SentryGlas® Plus not only starts clear, it stays clear with a yellowness Index (YI) starting at 1.5 (versus 6 to 12 for conventional interlayer's) and SentryGlas® Plus keeps it's clarity after years of service.

Sunergy Clear Laminated Glass

	Reflective colour	Visible Light(%)			Solar Engergy(%)		U-Value			
Glass makeup		Trans	Refl.		Refl.		(W/M ² .K)		SC	SHGC
			Outer	Inner	Hans	Outer	Summer	Winter		
5Clear/0.38 Clear PVB/5Sunergy Clear	Light grey	67	8	10	46	8	3.32	4.03	0.65	0.56
6Clear/0.38 Clear PVB/6Sunergy Clear	Light grey	67	9	10	45	8	3.32	4.03	0.64	0.55
8Clear/0.38 Clear PVB/8Sunergy Clear	Light grey	66	8	10	44	8	2.28	3.39	0.63	0.55
10Clear/0.38 Clear PVB/10Sunergy Clear	Light grey	64	7	9	43	7	2.24	3.35	0.62	0.54

Planibel.G Laminated Glass

		Visible Light(%)		Solar Engergy(%)		U-Value				
Glass makeup	Reflective colour	Trans	Refl.		Trans	Refl.	(w/m ² .k)		SC	SHGC
			Outer	Inner	Trails	Outer	Summer	Winter		
5Clear/0.38 Clear PVB/5Planibel	Clear	81	10	11	61	8	3.00	3.77	0.78	0.67
6Clear/0.38 Clear PVB/6Planibel	Clear	78	9	9	55	7	2.98	3.74	0.72	0.62
8Clear/0.38 Clear PVB/8Planibel	Clear	74	8	8	48	6	2.93	3.68	0.65	0.57
5Green /0.38 Clear PVB/5Planibel	Green	69	8	10	37	6	2.99	3.77	0.56	0.48
6Green /0.38 Clear PVB/6Planibel	Green	65	7	8	31	6	2.98	3.74	0.52	0.44
8Green /0.38 Clear PVB/8Planibel	Green	60	6	7	25	6	2.94	3.70	0.48	0.42
5Blue/0.38 Clear PVB/5Planibel	Blue	55	7	9	38	6	2.99	3.77	0.57	0.49
6Blue/0.38 Clear PVB/6Planibel	Blue	49	6	7	32	6	2.98	3.74	0.52	0.44
8Blue/0.38 Clear PVB/8Planibel	Blue	43	5	6	26	6	2.96	3.70	0.47	0.41
5Euro grey/0.38 Clear PVB/5Planibel	Grey	44	6	9	34	6	2.99	3.77	0.54	0.46
6Euro grey/0.38 Clear PVB/6Planibel	Grey	38	5	7	28	5	2.98	3.74	0.48	0.41
8Euro grey/0.38 Clear PVB/8Planibel	Grey	32	4	6	22	4	2.96	3.70	0.42	0.37