

## Guardian Bird1st™ UV

Twice a year, migratory birds embark on a long, cross-continental flight. But their journey is often cut short. From hummingbirds to colorful warblers, bird populations are decreasing – and glass buildings are one reason why. While humans can use environmental cues to identify glass as a barrier, there is growing realization that birds cannot. Unfortunately, researchers estimate that up to two billion birds die each year¹ in the U.S. due to glass and building collisions. A solution to this issue is to design buildings that are bird-friendly in addition to being people and environmentally friendly.

## **Protect birds with tested results**

Guardian Bird1st UV glass offers the right balance of solar performance, aesthetics and bird safety – so you can start designing your bird-friendly building through one trusted source. A patent-pending UV stripe coating on the first surface looks transparent in most viewing conditions.<sup>2</sup>

The Guardian Bird1st UV stripe coating visually signals an impending barrier to birds and helps prevent collisions. This product meets the 2" x 2" rule for various bird sizes and species and has proven efficacy through tunnel testing. Bird1st UV has received a Threat Factor<sup>3</sup> (TF) score of  $\leq$ 25 from the American Bird Conservancy, which defines "bird-friendly" materials as those with a TF score of  $\leq$ 30.

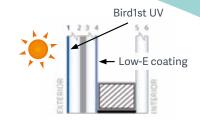
<sup>1</sup> Klem, Daniel, et al. "Evidence, Consequences, and Angle of Strike of Bird-Window Collisions." The Wilson Journal of Ornithology, vol. 136, no. 1, 2024, pp. 113–119, https://doi.org10.1676/23-00045.

<sup>2</sup> The visibility of the stripes is low when the coating is dry. The stripes are more visible when there is moisture on the #1 surface of the Bird1st UV glass.

<sup>3</sup> Threat Factor indicates the percent of times in which birds will not avoid collision, as tested by the American Bird Conservancy.

## Help save energy, help save birds

Guardian Bird1st™ UV glass is applied to surface 1 with the SunGuard™ low-E coating on surface 4 of an outboard laminated IGU and helps limit bird collisions while leaving views clear and open.

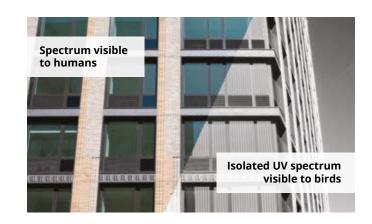


SunGuard low-E Product	Threat Factor	Visible Light				Solar Heat	U-Value		
		Trans- mittance %	Reflectance		Color Rendering	Gain Co- efficient	Winter Night (Btu/	Summer Day (Btu/	Light to Solar Gain
			Out %	In %	Index	(SHGC)	hr·ft²·F)	hr·ft²·F)	
6mm/0.060 pvb/6mm/12.7mm a.s./6mm									
Bird1st UV with NU 78/65 on Clear	20	76	12	12	96	0.55	0.30	0.29	1.38
Bird1st UV with SN 68 on Clear	18	66	10	12	94	0.36	0.28	0.27	1.84
Bird1st UV with SN 54 on Clear	22	53	13	20	95	0.28	0.28	0.26	1.87
Bird1st UV with SNX 51/23 on Clear	23	50	13	13	93	0.24	0.28	0.26	2.08
Bird1st UV with SNX 62/27 on Clear	25	60	10	12	92	0.27	0.28	0.26	2.21
Bird1st UV with SNX 70+ on Clear	17	64	13	15	91	0.28	0.28	0.26	2.28
6mm/0.060 PVB/6mm									
Bird1st UV monolithic – no low-E coating on Clear	17	87	8	7.6	97	0.74	0.95	0.86	1.17

Note: Figures may vary due to manufacturing tolerances. All tabulated data is based on NFRC methodology using Guardian's Performance Calculator. Values are for indication purposes only and are subject to variation according to conditions of measurement, manufacture and/or application.

## Bird1st UV product details and availability

- Six SunGuard low-E coatings: NU 78/65, SN 68, SN 54, SNX 51/23, SNX 62/27 and SNX 70+
- Two substrates: clear and Guardian UltraClear™ low-iron glass
- Pattern: vertical stripe orientation
- Maximum Size: 102" x 144"
- Thickness: 6mm
- · Laminated outboard required
- · Heat treatment required



For more information on Guardian Glass bird-friendly products, visit  ${\color{red} {\bf Guardian Glass.com}}.$ 

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www.guardianglass.com

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