

SAFETY

- Clear Sight Lines
- Forced Entry Protection
- Bullet Resistant

DAYLIGHTING & VIEWS

- Natural Daylighting
- View Preservation
- Glare Control

SOLAR CONTROL

- Occupant Comfort
- Energy Savings
- Downsize HVAC

DESIGN FREEDOM

- Maximize glass while being code compliant
- Reducing shading elements
- Easy Installation and operation

INCREASED VALUE

- Sustainable Design
- Reduced Fading
- Noise Reduction & Safety

CREATING SAFE SPACES TO LEARN

Students are our future. We want to make sure they can thrive in an environment that is conducive to learning: an environment that offers safety, comfort and that has spaces filled with natural light.



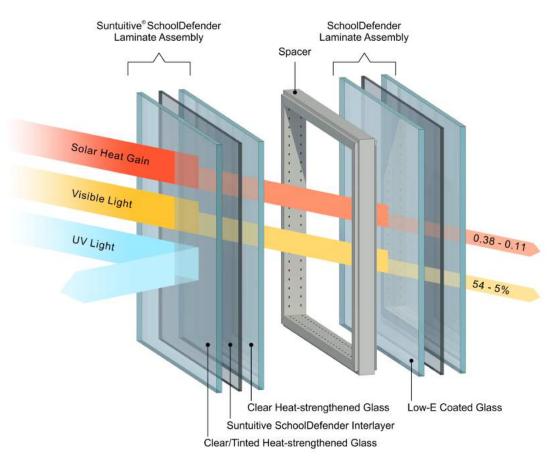
SCHOOLDEFENDER, THE ONLY DYNAMIC SAFETY GLASS ON THE PLANET

The most used Dynamic Glass technology around the world is now your best defense. Suntuitive SchoolDefender has been specifically designed and tested for use in schools and is becoming the new standard in security glass. Creating a strong safety culture starts at entryways, doors, and windows. SchoolDefender provides your school building, students, and faculty with forced entry protection as well as protection against a range of ballistic threat levels. SchoolDefender is completely customizable and can be easily installed into new construction or retrofitted into your existing structure.

With Suntuitive SchoolDefender you get both safety and daylight benefits without compromising. Our dynamic glass technology works with the sun's light to allow for optimal daylighting without excess heat and glare. Students and faculty will hopefully never need to see how the glass of your building can protect from a threat, but they will be able to enjoy the benefits of your dynamic glass each day. Students and staff will be comfortable, enjoy unobstructed views, and receive all the benefits of natural daylight in addition to knowing they are safe behind Suntuitive SchoolDefender.



Construction Suntuitive SchoolDefender: L1 Bullet Resistant



The only safety glass for schools with thermochromic technology

Our thermochromic elements, embedded in PVB (polyvinyl butyl) interlayer laminated between two pieces of glass, activate by heat from direct sunlight. As the light heats the glass the Suntuitive Interlayer becomes warm and darkens, effectively causing the glass unit to darken as necessary. As the sunlight recedes the glass returns to its clear state.

With some additions to the interlayer stack Suntuitive SchoolDefender now also offers the benefits of Forced Entry Protection or even (pictured) bullet resistance by adding a laminated construction on the inboard of the glass unit. Each of these versions are constructed to fit most new and existing applications and as such are perfect for glass replacement as well as new projects!

CHOOSING SCHOOLDEFENDER IS SIMPLY THE BRIGHTEST CHOICE!

Suntuitive SchoolDefender is like no other safety glass for school. It doesn't 'just' offer protection from intruders, but also offers protection from the sun, which increases visual and thermal comfort in schools. Research has shown that optimized daylighting in schools increased test results and general well-being of those inside. SchoolDefender's benefits are enjoyed every day and not just for those events you hope will never happen!

Suntuitive SchoolDefender		Visible Light Transmission (VLT)		Solar Heat Gain Coefficient (SHGC)		Total solar Transmission	
Exterior Tint	Low-e	Clear ←	→ Tinted	Clear ←	→ Tinted	Clear ←	→ Tinted
Clear	2x Low-E	0.54	0.08	0.38	0.17	0.25	0.07
	3x Low-E	0.49	0.07	0.31	0.13	0.18	0.03
Medium Grey	2x Low-E	0.38	0.06	0.28	0.14	0.17	0.04
	3x Low-E	0.34	0.05	0.25	0.11	0.12	0.02
Medium Blue	2x Low-E	0.34	0.05	0.28	0.14	0.23	0.03
	3x Low-E	0.31	0.05	0.24	0.11	0.12	0.02

- Clear values represent 5C and tinted values 65C.
- U-value is 0.24/0.25 for all of the options shown in the above table.

	SchoolDefender FEP (forced entry protection)	SchoolDefender L1 Bullet Resistant	
Thickness (min)	15/16"	1 1/16"	
Weight	6.16/lbs	7.33/lbs	
Maximum Size	48 x 96	48 x 96	
Forced Entry Protection (UL972)	yes	yes	
Number of Swings Before Failure	187	273	
Bullet Resistant		Level 1	
Safety	CPSC 16 CFR 1201		
Manufacturer Compliance	ASTM C1036, ASTM C1048, ASTM C1172		
Options	Choice of tint, size, choice of low-e and shapes		



IT PAYS TO PICK THE BRIGHTER SOLUTION

It doesn't happen too often that the best solution is also the most cost-effective but choosing Suntuitive SchoolDefender really is the brightest option in every way. Not only does it offer a higher level of safety than other school safety glass products with a version with standard bullet resistance, but it offers all the benefits of dynamic glass on top of that. With positive effects on your students results and more well-being for all. And at a cost that is lower than any school-specific safety glass products. Dare we say 'no-brainer'?

	SchoolDefender	Other School Safety Glass
Daylighting & Views		
Daylight optimization	•	
View preservation	•	
Glare control	•	
Solar Control		
Increased Occupant Comfort	•	
Energy Savings	•	
Downsize HVAC	•	
Design Freedom		
Maximize glass while code compliant	•	
Reduction of shading elements	•	
Easy installation and operation	•	•
Increased Value		
Sustainable Design	•	
Increased Productivity/Focus	•	
Reduced Fading	•	
Noise Reduction	•	•
Safety		
Clear Sight Lines (no blinds)	•	
Forced Entry Protection	•	•
Bullet Resistance Standard	• (L1)	
Product Cost	\$	\$\$