

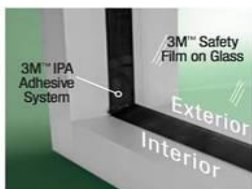


Solarshield edge retention systems, are designed to increase glazing safety & security and can also be used overhead.

We offer a range of different anti-fragmentation safety film thicknesses, combined with different edge retention systems for added glass safety.

3M Ultraflex Window System

With the 3M Ultraflex Window System installed by Solarshield, you can improve safety and the overall performance, with the addition of 3M Ultra S800 Safety and Security Window Film combined with the IPA edge retention.



3M Window film attachment systems



This unique system combines the elasticity of the 3M Ultra Safety and Security Window Film (140%) and a Dow Corning 995 Silicone Structural Adhesive system (160%) that creates a more stretchable membrane to help capture and absorb the impact energy.

The flexibility of this system will also increase the ability of the system to cycle due to blast pulse and wind storm energies that create positive and negative pressure effects or by twisting forces associated with earthquakes. In addition, resistance to smash-and-grab and forced-entry impacts can also be improved with the installation of the 3M Ultraflex system.

3M Ultraflex Window System allows the frame to bend and twist to accommodate a variety of stresses, increasing personal safety from flying glass.

For ease of use, the Ultraflex system offers a simple, more cost effective attached system when compared to more bulky mechanical attachment alternatives.

The strength of a film isn't necessarily related to its thickness. By using multiple layers of micro-thin polyester film, 3M Ultra film outperforms other films of similar thickness. This superior performance is due to the remarkable flexibility of the film.

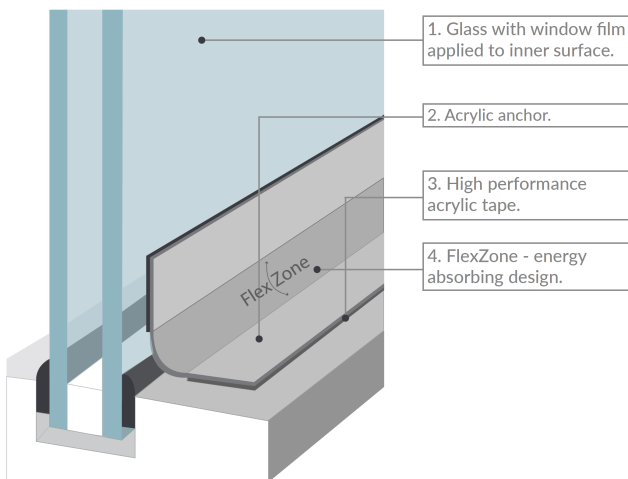
So while other films may tear, our film merely stretches and, depending on the application system, can help keep the window in the frame even when the glass breaks.

3M Impact Protection Attachment Systems have been subjected to windstorms, various levels of both GSA and ISO bomb blasts, all kinds of flying objects and a rigorous series of durability tests.



Solarshield Flexi 25 edge retention systems, are also designed to increase glazing safety & security and can also be used overhead.

Solarshield Flexi25 glass anchoring system



The Flexi25 Glass Anchoring System is installed on all four sides of the window, once the anti-shatter window film has been applied.

With adhesion to the frame and adhesion to the inner surface of the filmed glass, the Flexi 25 Glass Anchoring System is designed to allow the daylight window film application of window film to be restrained within the window opening and prevent glass fragments or debris entering the test building interior.

Flex 25 is designed to delay the point at which the filmed glass pane enters the interior and works in combination with the window film to reduce hazards to occupants standing within 3m of the window.

The Profile is currently available in Black, White & Grey, plus 3 sizes to accommodate various frame designs

Small = (12mm + 5mm Flexzone + 12mm) Medium = (12mm + 12mm Flexzone + 15mm) Large = (15mm + 24mm Flexzone + 15mm)

The Flexi 25 has some unique characteristics such as Reusable Materials

plus has been tested to ISO 16933 EXV25 at Comblasts (Tests in 2019) Tested & Certified using 100kg of TNT at 25 metres.

Flexi25 Acrylic Anchor

Properties	Values	Standards
Material	Acrylic	
Relative Density Vicat	1.48g/cm ³	Density Balance 80°C
Softening Point	BS 2782:102B/ISO306	2800MPa
Flexural Modulus	BS 2782:320A/ISO178	
Tensile yield strength	44MPa	BS 2782:320A/ISO527
Tensile break strength	43MPa	BS 2782:320A/ISO527
Elongation @ break	80 mins	BS 2782:320A/ISO527
Heat Stability Flammability	30 mins	Heat Block -200°C
	V0 1.6 mm	UL94

Flexi25 High Performance Tape

Properties	Values
Material	Acrylic
Thickness	1000 µm
Max. Temperature Resistance	200°C
Adhesion to Aluminium, Glass & Steel	24.0 N/cm (after 3 days)