



Future Glass Website BLASTSHIELD

BLASTSHIELD

Protection from every blast

Specially configured to withstand bomb and grenade attacks, our BLASTSHIELD units are designed to hold firm in the unfortunate event of a blast. These multi-layer panels get laminated with polycarbonates to minimise the risk of flying glass debris after an explosion. It's important to note that blast-resistant windows do not function in isolation – they only work as part of a system involving the glass, framing and anchoring system, and the structure of the building. If the framing or anchoring system is not blast-resistant, it may be unable to hold the glazing in the event of a blast, which may cause the glass panel to fail. We will provide you with a qualified blast engineer who will help you create the ideal design for your blast-resistant project.

Key Features

Multiple Applications

We process and test our BLASTSHIELD panels for use in curtain walls, doors and windows to protect from inside and outside threats.

International Test Compliance

All our panels get tested according to ISO 16933 and US-GSA standards.

Robust Processing System

We use computer-assisted calculations to determine the thickness of layers required to contain the blast and correlate the test results to the project requirements.

End-to-End Service

Our in-house blast engineer will provide a consultation to understand your safety requirements and suggest the glass and glazing required to meet them. Once we process the glass and glazing system, we will install it on-site to ensure it meets the required safety standard.

Design Flexibility

We can build and engineer attractive blast-resistant glass and glazing systems in various colours to meet the design requirements.

Technical Specifications

ISO 16933 Classification Criteria

Classification	Peak Pressure of the Shock Wave (kPa)	Positive Impulse (kPa-ms)
EXV45(X)	30	180

EXV33(X)	50	250
EXV25(X)	80	380
EXV19(X)	140	600
EXV15(X)	250	850
EXV12(X)	450	1200
EXV10(X)	800	1600

Performance Condition	Security Level	Hazard Level	Description of Window Glazing Response
1	Safe	No breakage	Glazing does not break No visible damage to glazing or frame
2	Very High	No risk	Glazing cracks but is retained by the frame Dusting or very small fragments near sill or on floor acceptable
3A	High	Minimal risk	Glazing cracks and fragments enter space and land on the floor, no further than 3.3 feet from the window
3B	High	Very low risk	Glazing cracks and fragments enter space and land on the floor, no further than 10 feet from the window
4	Medium	Low risk	Glazing cracks and fragments enter space and land on the floor and impact a vertical witness panel at a distance of no more than 10 feet from the window and at a height no greater than 2 feet above the floor
5	Low	High risk	Glazing cracks and window system fails catastrophically Fragments enter space, impacting a vertical witness panel at a distance of no more than 10 feet from the window and at a height no greater than 2 feet above the floor

Dimensions

Minimum Size	250 mm x 350 mm
Maximum Size	2500 mm x 5000 mm
Thickness Range	8 mm to 30 mm