



B.A.B.S. SYSTEM DATA

Transparent ballistic and forced-entry protection for retrofit and new construction

PRODUCT FAMILY

B.A.B.S.

APPLICATION

GLAZED OPENINGS

CONSTRUCTION

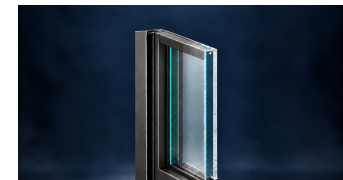
MODULAR / PROJECT-SPECIFIC

INSTALLATION

LICENSED INSTALLER

01 SYSTEM DESCRIPTION

The Ballistic Assault Barrier System (B.A.B.S.) is an interior transparent protection assembly engineered around the specific glazed opening. The system coordinates the original exterior or threat-side glazing, an optically clear polycarbonate barrier on the protected interior side, a controlled proprietary air space, compatible structural sealant, frame interface components, and anchorage. Retrofit configurations retain qualifying existing glazing; new-construction configurations integrate with storefront and transom-window framing from the design phase.



THREAT SIDE: ORIGINAL GLASS
PROTECTED SIDE: POLYCARBONATE

02 ASSEMBLY AND STRUCTURAL FUNCTION

Existing glazing	Original single- or dual-pane glazing remains at the threat side when approved by project assessment.
Transparent barrier	Scratch-resistant, optically clear polycarbonate is installed on the protected interior side; thickness is selected by protection objective.
Proprietary air space	A controlled separation between glazing and barrier supports energy dispersion and contributes to thermal performance.
Structural interface	Compatible structural sealant and attachment components maintain continuous engagement between barrier, frame and anchorage.
Frame and anchorage	Storefront or opening conditions are evaluated; reinforcement, fasteners and substrate anchorage are engineered for the project.
Modular closures	Perimeter members and finish components are fabricated to the surveyed opening for controlled fit, serviceability and architectural integration.

03 STRUCTURAL INTEGRITY AND DESIGN COORDINATION

- The protective barrier, perimeter attachment and supporting frame are treated as one load-transfer assembly.
- Existing frames and adjacent substrates must be verified for geometry, condition, capacity and compatible attachment.
- Panel joints, corners, door interfaces and transom openings are detailed to preserve continuity of the protected boundary.
- Final dimensions, barrier thickness, air space, fastener spacing, sealant geometry and reinforcement are project-specific.
- The modular construction supports retrofit access and custom finish integration without changing documented protection components.
- Shop drawings should identify threat side, protected side, opening type, substrates, anchors, edge conditions and required clearances.

PERFORMANCE QUALIFICATION

B.A.B.S. performance is configuration-specific. Test results apply only to the documented specimen construction, glazing, frame, attachment, anchorage, threat and shot pattern. The project submittal must identify the evidence applicable to the proposed assembly.



04 BALLISTIC AND FORCED-ENTRY PERFORMANCE

ASTM F3561-22

LEVEL 8

Forced-entry resistance

UL 752

LEVEL II TESTED

Documented on 1/4-inch glass

UL 752

LEVELS II - VIII

Protection configurations available

The documented ASTM and UL results are system-level evidence only where the proposed construction matches the tested specimen. Levels II - VIII availability describes configurable protection packages; the project record should identify the report or substantiation applicable to the selected configuration.

05 MATERIAL AND ENERGY-PERFORMANCE DATA

Break strength	Starting at 1,200 psi
Tensile strength	32,500 psi
Peel strength	6 psi
Total solar energy rejected	20%
Infrared rejection	59%
Ultraviolet rejection	99%

ENERGY-PERFORMANCE BASIS

The interior polycarbonate layer and controlled air space add a secondary thermal barrier while the applied material package rejects solar, infrared and ultraviolet energy. Prior Diamond Defense energy information presents estimated combined cooling-cost reductions of up to 45%, approximately \$5,400 annually, for a modeled 10,000 sq. ft. commercial space with 1,000 sq. ft. of windows. These figures are illustrative, not guaranteed project performance. Climate, orientation, existing glazing, HVAC efficiency, operating schedule and installed configuration materially affect results.

Published values originate in prior Diamond Defense technical documentation and relate to materials used within the B.A.B.S. construction.

06 CERTIFICATION AND REFERENCE FRAMEWORK

The references below describe testing, listings or approvals associated with materials and components used in B.A.B.S. construction. A material certification does not automatically certify the completed opening. Whole-assembly performance also depends on glazing, barrier thickness, air space, frame, sealant, fasteners, anchors, substrates and installation.

REFERENCE	TECHNICAL SUBJECT	SCOPE / ARCHITECTURAL INTERPRETATION
ANSI Z97.1-09 / CPSC 16 CFR 1201	Safety-glazing and impact requirements	Material/component evidence; verify edition, product identity and scope.
ANSI Z87.1-03	Impact-resistance reference	Legacy material reference; not a substitute for architectural assembly qualification.
GSA-TS01-2003	Blast-resistant window-system testing	Project use requires the applicable test report and matching construction.
UL 972 / ULC 332	Burglary-resistant glazing materials	Component listing; does not independently establish B.A.B.S. ballistic performance.
ASTM E1886	Windborne-debris impact procedures	Applicability depends on complete assembly and referenced installation conditions.
UL SAM E336663 / Miami-Dade NOA 15-1207.07	Listing and approval identifiers	Confirm current status, named product, limitations and approved installation.
UL 752 TESTING	Ballistic-resistance performance	Specify only documented configurations matching glazing, barrier, frame and attachment.

ARCHITECTURAL SUBMITTAL REQUIREMENTS

Product data and component identification • Shop drawings with threat/secure-side orientation • Opening survey and substrate conditions • Anchorage and reinforcement details • Applicable full test reports • Sealant compatibility and installation requirements • Finish samples • Installer qualifications • Project-specific thermal values when required



PRODUCT INFORMATION