

Custom Manufactured Special Purpose Doors & Windows





Bullet & Forced Entry















Acoustical & SCIF



Since 1936, Krieger Specialty Products has been producing exceptional acoustical doors and windows that beautifully accentuate a building's design while quietly operating as high-performance sound barriers.

Every Krieger acoustical door and window is manufactured to the size, shape, configuration, and finish option your client needs. Plus, they are delivered as complete acoustical assemblies with frame, door panel, hinges, seal, and threshold included.

Our SCIF compliant acoustical door assemblies are designed and manufactured for your customer's defense-related needs. Custom Manufactured to Your Specifications

STC Ratings

Door Assemblies: Up to STC 55 Windows: Up to STC 56

Tests and Certifications

ASTM E90 ASTM E336 ASTM E1408 ASTM E413 ASTM A1008 JUIAF

JAFAN DCID 6/9 ICPM 2006-700-7





م Acoustical & SCIF

Features

Door Configuration

Krieger's acoustical doors are available in single or paired hinged door assemblies. All doors can be configured with manual or power-operated controls, and with or without vision lites, side lites, and transoms.

Door Size

Krieger can design and manufacture doors in standard and custom sizes. No limits.

Style and Finish

We offer standard frame designs as well as specially engineered frame profiles to complement any architectural style. You can also add decorative mullions and moldings to complement any design.

Complete Door Assembly

Krieger acoustical doors are delivered as complete assemblies guaranteed to perform according to your specifications.

Door PanelHingesSealFrameThreshold



ADA Compliant

Krieger's acoustical door assemblies meet the Americans with Disabilities Act (ADA) threshold requirements of ½" without portable ramps, allowing them to be used in any location.

	stc rating 36 to 40	stc rating 41 to 44	stc rating 45 to 48	stc rating 49 to 53	STC RATING
Door Panel	S	O	I		S
Frame	S	0	I		S
Threshold	S		S	S	S
Seal	S	O	I	O	S
Cam Lift Hinge			STC 46 to STC 48	O	S
Standard Hinge	S	O	Up to STC 45	\bigcirc	\bigcirc
Single & Pairs	S		S	S	S
Vision Lite	Max 1400 Sq In	Max 1200 Sq In	Max 900 Sq In	Max 300 Sq In	\bigcirc
Fire Label	Up to 3 Hours	Up to 3 Hours	Up to 3 Hours	Up to 3 Hours	Up to 90 Min
Transom & Side Lite		0	S		\bigcirc
ADA Compliant	S	0	I	O	Contact Us
Built-In Bullet Rating	UL Level 1	UL Level 1	UL Level 1 & 2	UL Level 3	UL Level 3
Door Thickness	1 3⁄4''	1 ¾"	1 3⁄4''	1 3⁄4"	3"
Oversized Available	S	0	S	S	S



Acoustical Window Frame

Krieger's acoustical windows are available up to STC 56. We offer standard frame designs as well as specially engineered frame profiles to complement any wall construction or architectural style.

Window Sizes

We offer standard and custom sized windows to meet your needs. Windows exceeding the maximum single pane size utilize vertical and horizontal mullions as required to guarantee the specified STC rating.

Glass

Tested and certified acoustical glass or fire-rated glass and glazing materials are available in flat or sloped glass to meet your needs.

In addition, our windows can accommodate a variety of different types of specialized glass, including smart glass, clear glass, optical white glass, and low-emissivity (low-e) glass.

The Sliding Control Room Acoustical Window

With Krieger's sliding acoustical window, the control booth has never been more versatile. This operable window opens to allow for easy communication and closes to provide complete sound control.





Acoustical Doors with Built-In Bullet Rating

Krieger acoustical doors protect against unwanted sound in any building by exceeding the American National Standards Institute (ANSI) S12.60-2002 standard. Plus, they come with a bullet resistance rating of UL 752 up to Level 3 built in for added safety—with higher ratings available up to Level 10.



■) S	TC 45–48	3								
	I) 9	STC 49-	-55							
Comes with bullet resistance up to Level 3. Additional ratings are available up to Level						el 10.				
UL Level	1	2	3	4	5	6	7	8	9	10

Meets PASS Guidelines

Krieger products meet Partner Alliance for Safer Schools (PASS) guidelines, which were created by education, public safety, and industry experts to fill the gaps left by the lack of national standards in school safety and security.

The PASS Safety and Security Checklist tool is designed to help schools assess their building safety against national best practices and determine areas for improvement.

Optional Features

Forced Entry – 5 Min, 15 Min SD-STD-01.01 REV. G Armor Piercing (AP) Rounds ASTM F3038 ASTM F476

Higher bullet ratings are available up to UL Level 10.

A Trusted Partner for Schools and Universities

Since 1936, Krieger has been a trusted manufacturer of special purpose doors and windows for schools and universities across the country. We're proud to have our products installed at these premier educational facilities—and over 200 more.

Andover High School Cal Lutheran University Cedar Creek Middle School Claremont Graduate School Cornell University Elizabethtown High School Indiana State University Georgetown University Granger Middle School Harrison High School Harvard University Kaneland High School Kapolei High School New York University Ohio State University Stanford University University of Illinois University of Maryland University of Michigan University of Nebraska And over 200 more...







Krieger Cam Lift Hinges



Designed for Lasting Performance and Easy Maintenance

Krieger's HC30 Cam Lift Hinge is an industry game-changer featuring a new design that enhances radial strength to support heavy loading and ensure longer lasting performance.

Fire Rated Up to 3 Hours UL Standard 634 Certified ASTM F476 Performance 100% ADA Compliant

Easy, Time-Saving Maintenance

With Krieger Cam Lift Hinges, now one person can do in a matter of minutes what used to take two or more people hours.

A new fitting at the bottom of the Cam Lift Hinge makes it easy to lubricate—without having to remove the door from its hinges. Keeping hinges properly lubricated and maintained improves performance and extends the life of the door.

Security Pin Upgrade

For applications that require pressure and forced entry resistance, our Cam Lift Hinges can be upgraded with a security pin. This feature works by preventing the door from opening in the event of an attempted forced entry, causing a time delay and adding an extra level of security.

100% ADA Compliant

Krieger's lab testing of the Cam Lift Hinge shows it to be fully compliant with the Americans with Disabilities Act (ADA) requirements regarding the maximum force required to pull the door open—less than 5 pounds on door leaves under 500 pounds.

The versatility of the Cam Lift Hinge means it can be used in any location, even for heavy doors.

Cam Lift Hinge Finishes

Both the standard and electrified versions of our Cam Lift Hinges come in a stainless steel satin finish—32D. Custom finishes are available upon request.



Electrified Cam Lift Hinges

Krieger's electrified Cam Lift Hinges are used to power locksets, exit devices, and door monitoring switches. They work by passing low-voltage power and/or signaling from the door frame to the door.







Acoustical Door and Window Wall Assembly Highest Tested of Its Kind—Up to STC 52

Guaranteed to Achieve the STC Rating

Tested for Sound Loss in Spliced Areas

Industry-Leading Transmission Loss

Highest Lab Testing as a Unit

Krieger's Acoustical Door and Window Wall Assembly underwent rigorous National Voluntary Laboratory Accreditation Program (NVLAP) acoustical lab testing—as a unit with multiple configurations of doors, windows, and panels—and ranked higher than any other wall unit on the market. Its best-in-class performance makes it the ideal choice for any location exposed to noise.

Easier Installation

The perimeter and mullion sections of the Acoustical Door and Window Wall Assembly are filled with rock wool material for sound control instead of heavy grouting compound. Rock wool makes the unit much lighter weight, which makes installation faster and easier.

Lowest Frequency Loss

The NVLAP-accredited laboratory acoustical test reports demonstrate that the Acoustical Door and Window Wall Assembly exhibits industry-leading transmission loss between the 63 Hz to 125 Hz frequencies, with no deficiencies measured at greater than 95% confidence in dB. Its low-frequency performance ensures acoustical requirements are met.

Fire Rated Up to 90 Minutes

Most other wall unit products are not fire rated, but Krieger's Acoustical Door and Window Wall Assembly comes with a fire label and is fire rated up to 90 minutes with glazing, or up to 3 hours with acoustical transom or side lite panels.

8 Customizable, Changeable Configurations

As with all Krieger products, the Acoustical Door and Window Wall Assembly can be configured to your client's exact specifications of size, number, placement of doors and windows, and acoustical needs.





Flexible and Versatile The construction makes it possible to swap out the doors, glass panels, and mullion or astragal components.

Mullion or Astragal

Door pairs come with either a mullion or astragal to seal the gap between the doors when they are closed.



Case Study

The Getty Museum





Occupying over 750 acres of land in the Santa Monica Mountain foothills, the Getty Museum designed by Richard Meier is home to some of the world's most rare and valuable works of art. Originally opened with pieces from J. Paul Getty's private art collection, the museum now holds a compilation so large it takes four exhibition pavilions and nine buildings just to display a portion of it.

Ten years after opening to the public, the Getty commissioned some renovations to improve the visitor experience. Among these revisions was the replacement of its temporary exhibition closure panels with permanent sliding panels in the West Pavilion. Exhibition closure panels are typically used to cordon off sections of galleries from the public while new exhibits are being installed. But because they are time consuming to set up, stationary sliding panels are preferred in museums like the Getty, where exhibitions change frequently.



To design and manufacture the custom exhibition closure panels for the galleries, Doortek Systems, Inc., brought in Krieger Specialty Products. The challenge was to produce two oversized sliding panels featuring a slim-profile wicket door, which is a standard-sized door built into the larger sliding panel.

To conceal and diminish the silhouette of the wicket door, the frame and hardware were engineered to blend seamlessly with the sliding panel along with a flush vision lite built into the wicket door. The entire surface of the sliders was veneered with maple. Installation required special attention to ensure the sliders would function properly in a very tight space.

Krieger has tackled many unique projects in our 85+ years, and this challenging project was a welcome opportunity to provide specialized door solutions at a premier facility.





Blast & Pressure



Krieger's blast and pressure doors are used in commercial, government (UFC, ATFP, or others), and industrial (PIP) installations to protect personnel and property from explosions and explosion-borne missiles.

Each door is engineered to the desired resistance level. Pre-engineered and custom models for static or dynamic reflective loads, including designs to meet UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings.

Like all Krieger products, blast doors and windows are custom manufactured to the size, style, and finish requested. Custom Manufactured to Your Specifications

Resistance Levels

Pre-engineered available in: 100 PSF, 1.0 PSI, 2.0 PSI, 3.0 PSI

Substantially higher dynamic and static PSI loads are available. Contact us to discuss your project.

Tests and Certifications UFC 4-010-01 UFC 3-340-02

Additional criterias: UBC, NIJ, ASTM, Haz Mat, TM5-1300 ICC 500 (FEMA P-361), and More





Blast & Pressure

Features

Door Configuration

Krieger's blast doors are available as single or paired hinged door assemblies. We offer standard door frame designs as well as specially engineered frame profiles to complement any wall construction or architectural style. All assemblies can be configured with manual or power-operated controls, and with or without vision lites, side lites, and transoms.

Door & Window Size

Krieger can design and manufacture blast doors and windows in standard and custom sizes. No limits.

Style and Finish

Windows use tested and certified acoustical glass or fire-rated glass and glazing materials. Custom door finishes are available with decorative mullions and moldings to complement any project.

ADA Compliant

Krieger's blast door assemblies meet the Americans with Disabilities Act (ADA) threshold requirements of $\frac{1}{2}$ " without portable ramps, allowing them to be used in any location.



Complete Door Assembly

Krieger blast doors are delivered as complete assemblies guaranteed to perform according to your specifications.

Blast and pressure assembly includes:					
Door Panel	Hinges	Threshold			
Frame	Seal	Hardware			

Multi-Point Lock

Doors can be fitted with a multi-point lock or SAT device and continuous hinging systems for added protection.

Specialized Hybrid Performance



Tested and Certified to the UFC Standard Krieger Blast Doors Meet UFC 4-010-01

All Krieger blast-resistant doors are tested and certified to meet the United Facilities Criteria (UFC) 4-010-01 Department of Defense (DoD) Minimum Antiterrorism Standards for Buildings.

This standard establishes the criteria for the minimum engineering standards for DoD building projects that incorporate antiterrorism-based mitigating measures where no identified threat or level of protection has been determined.



Krieger is part of the U.S. federal government's System for Award Management (SAM.gov).





Bullet & Forced Entry



For decades, security experts and Department of Defense officals have relied on Krieger to develop custom doors and windows engineered for today's security ratings.

Krieger's bullet doors and windows are designed to protect personnel and property from small arms fire. Our products offer protection from bullets and ricochet on doors, frames, windows, pass-through trays, transfer boxes, and voice ports.

Plus, all Krieger door and window products are custom manufactured to meet the specifications for size, shape, performance configuration, and finish options of any project. Custom Manufactured to Your Specifications

Bullet Resistance

UL 752 Levels 1–10 NIJ (0108.01)

NIJ Levels I, IIA, II, IIIA, III & IV

Tests and Certifications

MIL-SAMIT Part 1 80 Ball MIL-SAMIT Part 2 Armor Piercing (AP) Rounds NATO M80 25 Shots in an 8" Circle





Bullet & Forced Entry

Features

Door Configuration

Krieger bullet-resistant doors provide protection as single or pairs of hinged or sliding doors with or without vision lites. All assemblies are available in manual or power-operated controls. Frames come in standard or specially engineered profiles to complement any wall construction or architectural style.

Door & Window Size

Krieger can design and manufacture bullet and forced entry doors and windows in standard and custom sizes. No limits.

Style and Finish

Windows use calculated and certified glass or glass/ polycarbonate glazing materials bearing the UL 752 mark. A variety of custom door finish options are available to complement any project.

Wall Panels

Bullet-resistant fiberglass wall panels are available and have been tested in accordance with UL 752 for Levels 1–4 (Levels 5–8 are pending).

Forced Entry Doors

Krieger's forced entry door was tested to the SD-STD-01.01 Forced Entry and Ballistic Resistance Standard—exceeding the 15-min test twice.

In addition, the door remained functional even after stopping multiple rounds of 7.62 mm from a NATO rifle—firing 150 gr. full metal jacket ammo. Then, the door withstood a six-man team attacking the door with everything from sledgehammers to battering rams.

Watch the Door Being Tested www.kriegerproducts.com

Door Construction

Doors are built with formed, heavy gauge, steel face sheets constructed around a custom engineered, steel rib core with interior armor plate as required to protect against specified threat.

Optional Features: Forced Entry – 5 Min, 15 Min

SD-STD-01.01 REV. G Armor Piercing (AP) Rounds ASTM F3038 ASTM F476

Hardware

Operating hardware is available in all standard builders' finishes. Mortise or cylindrical locksets, exit devices, and security hardware are the basic options.

ADA Compliant

Krieger's bullet door assemblies meet the Americans with Disabilities Act (ADA) threshold requirements of ½" without portable ramps, allowing them to be used in any location.

Exceeded The 15-Min Test Twice!



Bullet Accessories

Weapons Issue Port Door

Krieger's issue port door is designed to be used for weapons and armory/arms vaults. It features the required day gate, weapons pass-through opening with removable hatch, and 4-ply door.

UFC 4-215-01 Criteria Krieger has specifically designed this door to meet all UFC 4-215-01 Armories and Arms Rooms requirements.



Extra-Wide Opening 16" x 14¾"

Sliding Gun Port

Krieger's sliding gun port is customizable and designed to be mounted into a wall—or it can be added to a door in a smaller size upon request. It features an abrasion-resistant armor panel for enhanced performance.

Bullet-Resistant Louver

Krieger's bullet-resistant louvered vents allow air to pass through the door while providing a high level of security and protection.

Meets Ballistic Standards

Vents are ballistic resistant up to UL 752 Level 8 (other ballistic ratings are available upon request).

Custom Configurations

Louvered vents are available in a wide range of sizes and configurations, including hybridization options with door assemblies.

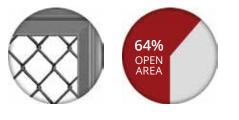


High-Security Day Gate

Krieger's day gate provides superior security, access control, and visual clarity where controlled substances, weapons, equipment, and other sensitive materials are stored.

Carbon Steel Construction

Krieger's high-security day gate is constructed from hot-rolled carbon steel tubing and 9-gauge expanded metal. It features ¾" flattened diamond-shaped openings with an impressive 64% open area for visual clarity.



Voice Ports



UL Levels 1–8

Gun Ports



UL Levels 1–8

Transfer Boxes



Pass-Through Trays







Radio Frequency





Krieger's radio frequency (RF) doors and windows are used in installations where TEMPEST standards are required, or where there exists a need for a radio frequency barrier for high-frequency shielding.

New!

1³/₄" Thick Radio Frequency and Acoustical Hybrid Door

We're now offering radio frequency doors with 40 dB RF protection and an STC 51 acoustical rating—all in a 1¾" thick door panel.

Custom Manufactured to Your Specifications

Radio Frequency Shield

Provides \geq 60 dB of shielding effectiveness in the electric, planewave, and microwave fields in the frequency range of 1 KHz to 18 GHz

Magnetic field shielding performance meets the requirements of NSA 73-2A (1 kHz, 10 dB; 10 kHz, 20 dB, 100 kHz, 30 dB, and 1 MHz, 40 dB)

Tests and Certifications

IEEE 299 Standard NSA 65-6 Division 8 Standard MIL STD-285







Features

Door Configuration

RF doors come in single or pairs of hinged doors in manual or power-operated controls. Assemblies can be tied in to any type of Faraday shielding enclosure.

Door Hardware

Available in all standard builders' hardware materials and finishes. Latch and lock sets, panic devices, security and power-operated hardware are also available. Radial bearing, Cam Lift Hinges are available.

Door Sizes

Standard and custom sizes are available. No limits.

ADA Compliant

Krieger's radio frequency doors meet the ADA threshold requirements of ½" without portable ramps, allowing them to be used in any location.

A True Faraday Shield

The basis for any RF-shielded construction is a six-sided enclosure—consisting of four walls, a ceiling, and a floor—with conductive materials to achieve what's known as a "Faraday shield." Krieger RF doors and windows are made to be integrated into any new or existing Faraday enclosure.

Window Configuration

RF windows can be tied in to any type of Faraday structure, including integrated vision lites within RF shielding doors.

Window Sizes

Standard and custom sizes are available, with no limits to overall window size. Single-opening sections are limited to 46" x 72" glass sizes. Windows exceeding the maximum single pane size utilize vertical and horizontal mullions as required.

Exceptional EMI/RF Shielding

RF Windows Greater Than 68 dB

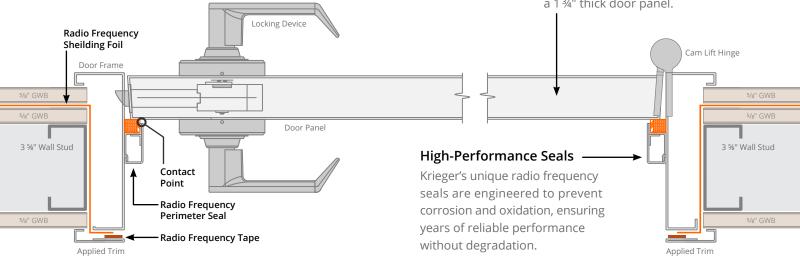
KRIEGER

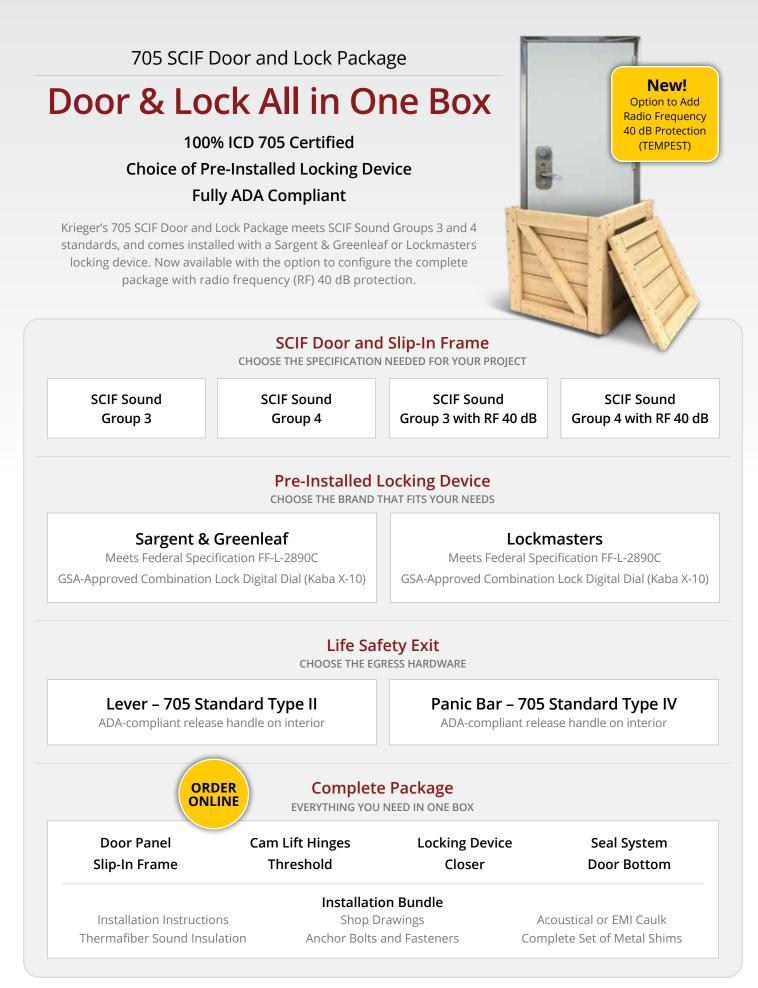
Windows come with broad spectrum EMI/RF shielding of 68 dB up to 95 dB as tested per IEEE-299 2006. Doors offer \geq 60 dB of shielding effectiveness in the electric, planewave, and microwave fields in the frequency range of 1 KHz to 18 GHz.

NEW!

1³/₄" Thick Radio Frequency and Acoustical Hybrid Door

We're now offering radio frequency doors with 40 dB RF protection and an STC 51 acoustical rating—all in a 1³/₄" thick door panel.







Oversized Doors

Whether you're moving around extra-large items like machinery, stage props, or athletic equipment, or you require acoustical seals for HVAC cooling or simply blocking out noise, Krieger's oversized doors have you covered. Plus, we offer a full range of customized finish options to seamlessly match any project, no matter how big.









Case Study

The University of Redlands

When the University of Redlands, located in the city of Redlands, California, was undergoing renovations of its beautiful 140-acre campus, the expansion of an existing on-site electrical plant was high on the priority list.

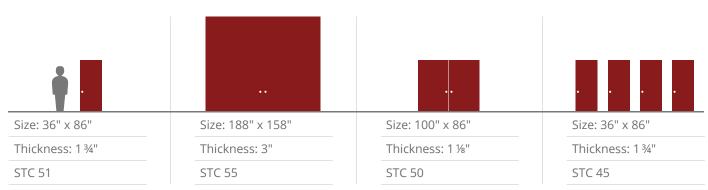
The expansion comprised a \$5.5 million building and a brand new 1,500-kilowatt Caterpillar generator powered by natural gas installed to share the campus's electric load.

With the building and generator located on campus, it was immediately clear that powerful, extra-large acoustical doors were required to prevent noise leakage while providing necessary access to the plant machinery. Sierra Wholesale, specializing in a commercial line of finishes and hardware, selected Krieger to manufacture the oversized acoustical doors specified for the project.

Once the shop drawings were approved, Krieger quickly produced the door and frame assemblies as specified. When it was later discovered that measurements provided in the original drawings were inaccurate, although not at fault, Krieger took the initiative to remanufacture the doors and frames at no cost to the contractor. "Dedication, hard work, and the will to go



above and beyond what's expected is why our customers turn to us," comments Bob McCluney, Krieger's President. "It's the reason we have the kind of loyal customer relationships that we have."



Krieger's 7 Door Assemblies for the University of Redlands





Custom Finishes

Krieger offers a full range of custom finish options for doors and windows—all perfectly matched to complement the unique performance and aesthetic needs of any project.





Prime Painted

Krieger door panels and frame assemblies come painted with a primer coat and ready to apply the desired finish color.



Wood Veneer

Our wood veneer door panels come in a variety of wood species in unfinished, clear coat, or stained to match any architecture.



Stainless Steel

We offer stainless steel doors and frames in embossed, patterned, etched, bead blasted, and colored finishes.



Historic Designs

Our engineers can work with clients to design a specialty finish to match the historic architectural door and frame sight lines.



Glass

We offer certified acoustical or fire-rated glass, along with specialized glasses such as low-emissivity (low-e) glass, and more.



Moldings & More

Krieger doors can be finished with moldings, stone, metals such as brass and copper, and other specialty materials.



Visit www.KriegerProducts.com or call us at 562-695-0645.







Specialized Hybrid Performance

Krieger doors and windows are available in any combination of special purpose performance requirements needed.







ed Entry Rad





About Krieger

Since 1936, Krieger Specialty Products has been a leading manufacturer of specialized door and window products for acoustical, blast resistant, bullet resistant, radio frequency shielding, tornado, and hurricane applications. Built to your precise specifications, Krieger doors and windows have been the choice for premier structures all over the world.

Krieger assemblies are covered by our industryleading 10 Year Manufacturer's Guarantee.



Made in the USA All Krieger products are proudly designed and manufactured in the United States.



Krieger is part of the U.S. federal government's System for Award Management (SAM.gov).





Call us at 562-695-0645