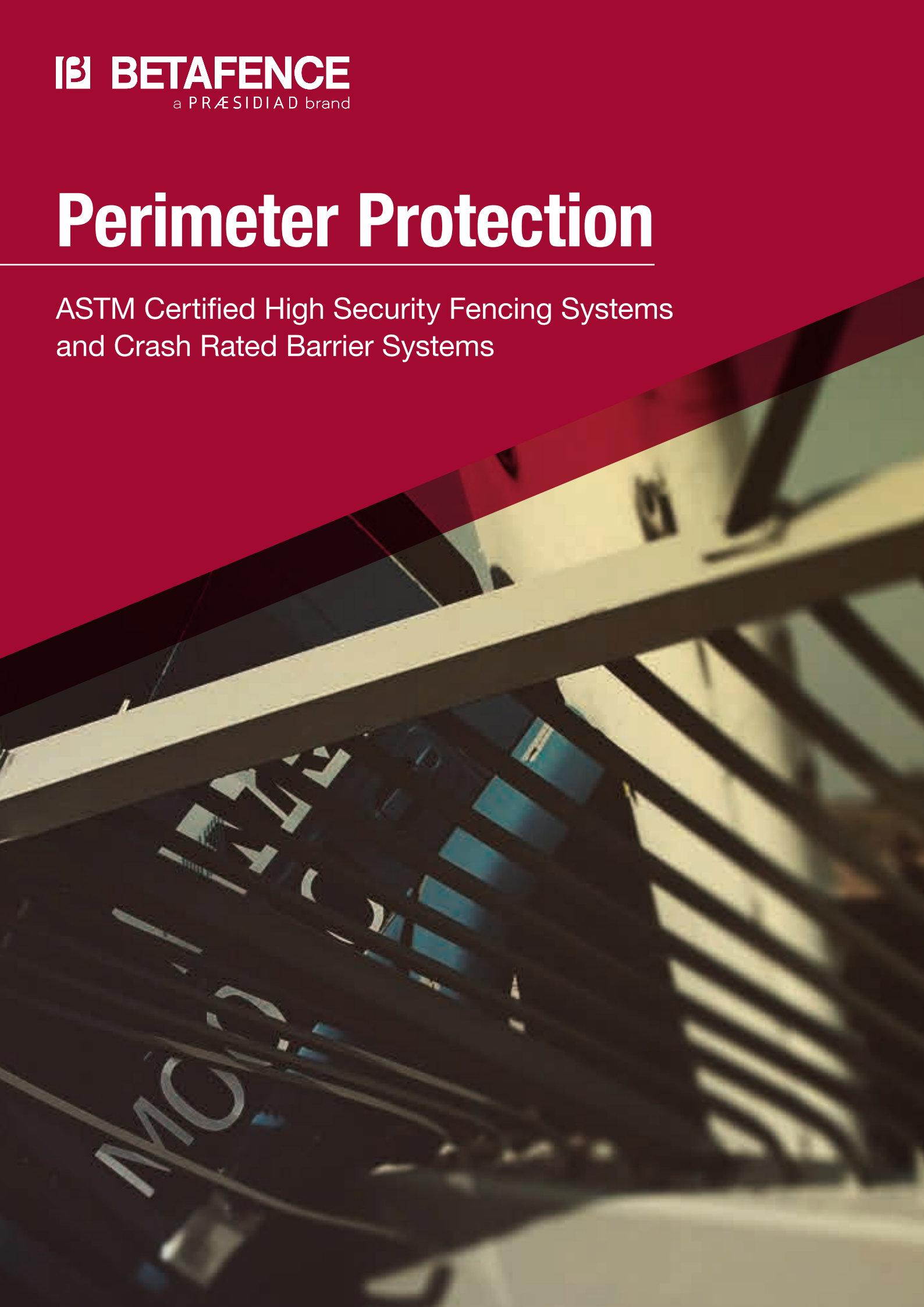
BETAFENCE
a PRÆSIDIAD brand

Perimeter Protection

ASTM Certified High Security Fencing Systems
and Crash Rated Barrier Systems



10 reasons to choose an ASTM-certified perimeter protection system

Here are **10 Reasons** to Choose an ASTM Certified Perimeter Protection System for Your Critical Site or Building:

1. Proven Security Performance
ASTM testing subjects products to realistic force, impact, and penetration tests, ensuring they perform as promoted under threat.

2. Objective, Third-Party Validation
Certification comes from independent accredited labs, not internal testing — so buyers get unbiased, credible results.

3. Standardized Comparisons
ASTM ratings for impact resistance or forced entry delay allow for “apples-to-apples” comparisons between different brands or designs.

4. Trusted by Government & Industry
ASTM standards are used by agencies like the Department of Defense (DoD) and Department of Homeland Security (DHS) — offering assurance for*critical infrastructure applications.

5. Fewer Liabilities, Higher Accountability
ASTM-certified systems come with documented performance records, protecting organizations from legal risk if a breach occurs.

6. Supports Insurance & Risk Management
Certification can strengthen insurance applications and reduce premiums by demonstrating commitment to safety and compliance.

7. Speeds Up Procurement & Approval
Many project specs and RFQs require ASTM-certified systems — making it easier to win bids and gain client trust.

8. Confidence in Real-World Durability
ASTM tests simulate extreme conditions, meaning certified systems are more likely to withstand actual threats over time.

9. Supports Long-Term Return on Investment
Certified systems may cost more upfront, but they last longer, perform better, and reduce replacement or repair costs over time.

10. Reinforces Brand & Reputation
Choosing ASTM-certified systems shows a commitment to safety, professionalism, and industry best practices — which reflects well on any organization.

Introducing **ASTM**

ASTM (American Society for Testing and Materials) is a globally recognized organization that develops and publishes standards for a wide range of materials, products, systems, and services including perimeter protection systems.

Established for over 125 years, ASTM has grown into one of the world’s largest standards organizations, with over 13,000 standards used across more than 140 industries.

Products tested to ASTM standards demonstrate a verified level of reliability and are often required for government procurement and critical infrastructure projects worldwide.

Betafence has approved perimeter protection systems certified against 2 key norms:

ASTM F2781:
Standard Practice for Testing Forced Entry, Ballistic and Low Impact Resistance of Security Fence Systems

ASTM F2656:
Standard Test Method for Crash Testing of Vehicle Security Barriers

ASTM F2781:

Standard Practice for Testing Forced Entry, Ballistic and Low Impact Resistance of Security Fence Systems.

This certification demonstrates that a fence system has been tested and proven to resist forced entry attempts. The standard checks how strong and secure a fence is when someone tries to break through it using tools.

The testing is done by professionals under controlled conditions, and if the fence passes, it shows it can delay or stop intruders for a certain amount of time — which is critical for protecting sensitive or high-security areas.

Betafence ASTM **F2781 Certified Fencing Systems:**

- Securifor 4D
- Securifor 4D USA
- Guardian 1000
- Guardian 5000
- Guardian 7000
- Securifor Defender
- Securifor Aman
- TriMax

Betafence ASTM **F2656 Certified Systems:**

- BLOKAD Crash-Rated Barrier
- BLOKAD Static Bollards
- Future Wedge 2400
- Future Wedge 3600
- Terrablock XV 4

Securifor® 4D

The Securifor 4D system's unique feature of front and back alternating wires offers excellent rigidity for high security environments.

Benefits

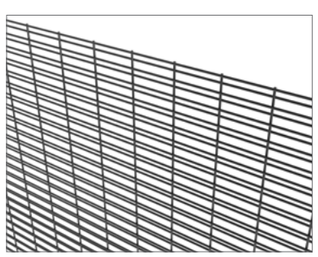
High Rigidity
Securifor 4D is the ultimate in heavy weldmesh panel fencing when the highest degree of security is needed. With individual alternating wires (1/1), the panel is 10 times stronger than a flat panel. The system has been tested and certified in accordance with ASTM F2781, a recognized standard that sets strict safety and performance criteria for high-security perimeter barriers. This certification confirms its suitability for critical infrastructure and demanding security environments.

Adequate delay time
Securifor 4D's unique feature of alternating wires makes it cumbersome to cut when a breach is attempted. The small mesh apertures (standard: 12.7 x 76.2mm) offer no toe or finger holds, making it near impossible to climb. This results in a longer delay time between first attempt and possible breach, offering response teams and reaction mechanisms adequate time to deploy and intercept effectively.

Visibility
Securifor 4D offers excellent visibility through the fence, essential for use with CCTV and surveillance systems.

Discreet
Securifor 4D has a minimal visual impact on the environment due to its sleek and clean design. Our many colour options can be incorporated into an overall look and feel, if required.

Product detail

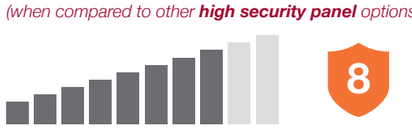


Functionalities

DESIGN | DISSUASION | DELAY

Security level

*(when compared to other **high security panel** options)*

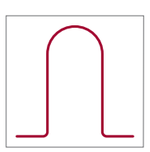


Post and fixing systems

(post shape illustrated below)

Securifor® Rectangular
Metal posts dimension **80 x 60 x 2.5mm or 120 x 60 x 3mm** (depending on the post length) with plastic cap on top. The posts have a single row of M8 threaded inserts. The panels are fixed using specific spider fixators or full-length cover plates and one-way bolts.

Bekafix® Ultra
Metal posts dimension **70 x 44mm**, H-shape with hook plastic cap. Coating and post steel strength are higher, for corrosive environment or high fences. Panels are attached to the side of the posts using a metal fixator.



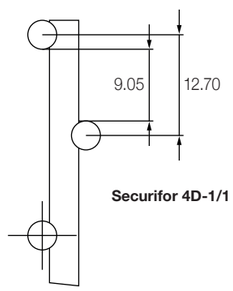
Bekasecure®
Metal posts dimension **140 x 135 x 4mm**. Front of the post is equipped with a double range of holes **10 x 20mm** and the panels are secured to the posts with a continuous cover plate and specific stainless steel security bolts. The open profile of the post (patented) allows for electrical or fibre optic cabling and is closed on top with a specific metal cap.

- *For more information on the above posts, please refer to the relevent product page or flyer*

Panels

Securifor 4D panels are 2823mm width or 2514.6 mm depending on the height. A mesh pattern with alternate wire for heavy security.

- Mesh size: 76.2 x 12.7mm
- Horizontal wire diameter: 4mm
- Vertical wire diameter: 4mm



Securifor 4D-1/1

Coating technique

Panels are made of pre-galvanised wire (minimum 30g/m²) and polyester top layer with a minimum a layer thickness of 100 microns. The PES coating thickness is the average of 10 measurements.

Colours

Green RAL 6005. Other colours are available on request.

Gates

The Securifor 4D system is supplied with matching gates using the same high security mesh infill as the fence. Single or double swing gate or sliding gate.

Securifor® 4D range	
Fence height (mm)	**Panels width x height (mm)**
2000*	2819.4 x 2006.6
2400*	2819.4 x 2413
3000*	2514.6 x 2997.2

* Complete assortment is MTO. Other heights available on request

Securifor® 4D USA

USA - FORCED ENTRY TESTED WELDED MESH PANEL

- ASTM F2781 tested for forced entry and ballistic resistance
- Deters and delays attacks
- 750% more rigidity
- 10 year warranty
- Superior anti-corrosion coatings

Benefits

Extreme rigidity
Securifor® 4D's alternating wire configuration is tested* and proven to be over 750% more rigid than traditional flat panels. This reduces engineering requirements or the need for rails to stabilize the panel.

Adequate delay time
Forced entry tests conducted to *ASTM standards produced a Low Threat attack** of nearly 8 minutes before the panel is breached.

Superior corrosion resistance
Securifor® 4D can be hot dipped galvanized or coated with a super-durable architectural grade powder coating.

Long Service Life
Surveillance systems have unobstructed visibility of activity behind the fence. The added rigidity reduces false alarms and reliability and contributes to a detection system's accuracy and reliability.

*Panels tested in a horizontal orientation and subjected to a 500N force.
**Threat attack levels as defined by ASTM F2781 Standard.

Systems detail

Functionalities

DISSUASION DELAY

Security level

*(when compared to other **high security panel** options)*

8

Panels

Every horizontal wire alternates between the front and back of the vertical wires delivering increased rigidity. The panels are fixed using specific full length cover plates and security bolts and nuts.

Posts

The posts are available in a limited range of sizes to accommodate project specifications.

Gates

The Securifor® 4D Fence System is compatible with a wide range of gate styles such as swing, v-track and cantilever gates.

Superior Coating

The Securifor® 4D panels are manufactured using galvanized steel wire, coated with Betafence's exclusive Architectural Grade Powder Coat. This coating is super-durable and environmentally sound. Our powder coating provides the industry's highest weatherability and Gloss Retention in UV exposure – up to 5 times longer than competitors' powder coatings.

Colours

- Black

Other colours are available on request.

Warranty

The Securifor® 4D Fence System is produced using the highest quality material and equipment – and is backed by our 10-year Manufacturer's Warranty.

SECURIFOR® 4D SPECIFICATIONS			
Panel Width (Nominal)	**Wire gauge**	**Panel height**	**Post length**
8ft or 10ft	8	8ft	11ft
8ft	8	10ft	13ft

Guardian® 1000

A higher security alternative to chain link, in one fencing system. Seamless security integration, high visibility 'for combination with cctv system' with easy and flexible installation, that is also simple to upgrade, repair and maintain.

The value engineered Guardian® 1000 fence system provides a high level of security with all the advantages of the guardian system but with an industry leading price point..

Benefits

ASTM F2781 Tested and Certified Anti-Climb Fencing System
The Guardian Fence System® protects against cutting and climbing, thanks to security mesh with small openings that resist common cutting tools and prevent hand or foot holds. The system has been tested and certified in accordance with ASTM F2781, a recognized standard that defines performance and safety requirements for automated perimeter security gates and components. This certification confirms that the system meets strict criteria for strength, durability, and operational reliability in high-security environments.

Engineered design
Steel rails within the Guardian® Fence System create a protective conduit for security cabling while providing a superior, fully-integrated security barrier.

Efficient installation
Panels are fixed to steel rails, which themselves are face mounted to steel posts. This fence platform configuration allows for fast installation without needing exact post spacing.

Panels

The system is combined with our well established high strength, security mesh panels to create an effective anti-cut, anti-climb barrier

High Security Guardian unions

Guardian Unions securely connect panels to high-strength horizontal rails within the Guardian Fence System® and is then secured with bolted steel straps adding additional rigidity to the fence.

Gates

Choose from our wide range of gate styles such as swing, v-track and cantilever.

Reliable Safety Standard

The ASTM F2781 standard defines rigorous performance criteria for automated sliding gates used in high-security perimeter applications. The system we offer has been **tested and certified** in accordance with this standard, ensuring compliance with key safety, reliability, and operational requirements. This certification provides assurance that our solution meets the expectations of professionals securing sensitive or critical sites. Recognized in North America and internationally, ASTM F2781 compliance is a trusted mark of quality for motorized gate systems.

Coating

High quality galvanized steel and aluminum components used throughout the system deliver a longer service life.

Guarantee

Market leading 10-Year Manufacturer's guarantee.

Available Infills

Welded Wire

Expanded metal

GUARDIAN® 1000 SPECIFICATION

Description	Name	Size	Screening %	% Open area
Welded Wire	Securifor 4D 54-30	2.125" x 1.18" x 8ga	20%	80%
Expanded Metal	Sentry 112-13	1-1/2" x 13ga	21%	79%

Description	Name	Thickness		Lbs per 100 sq ft		Short opening size	Long opening size
		Strand width	Strand Thickness	Plain	Hot Dipped		
Welded Wire	Securifor 4D 54-30	0.155		97	105	1.03	1.97
Expanded Metal	Sentry 112-13	0.138	0.090	58	64	1.2	2.6

Additional options available. Contact us for a solution that meets your specific security requirements.

Product detail

Functionalities

DISSUASION | DELAY | DESIGN

Security level

*(when compared to other **high security fencing systems** options)*

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Guardian® 5000

High-strength security mesh constructed within a modular framework. Heavy-gauge mesh and small mesh openings to resist cutting tools and climbing. Seamless security integration with anti-corrosion coatings.

The Guardian® Fence System is the first system to provide a total security solution, with seamless security integration, easy installation, upgrade, repair, and maintenance.

Benefits

ASTM F2781 Tested and Certified Anti-Cut & Anti-Climb Panels
The Guardian® 5000 system offers high protection against both cutting and climbing, using heavy-gauge welded mesh with small openings that resist hand or foot holds and are difficult to breach with common cutting tools. Equipped as standard with DutyGuard 3-5-8 welded wire mesh, the panels are also available with alternative mesh types to suit specific threat levels or architectural needs. The system has been tested and certified in accordance with ASTM F2781, a recognized standard that sets rigorous performance and safety criteria for perimeter security components.

Engineered design
Steel rails within the system create a protective raceway for security component cabling such as intrusion detection, surveillance, and access control; providing a superior, fully-integrated security barrier.

Efficient installation
Panels are affixed to steel rails, which are attached to steel posts. This smart fence platform configuration allows for fast installation without exact post spacings required.

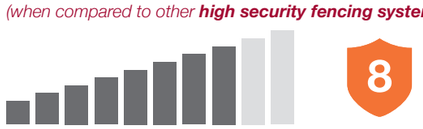
Product detail

Functionalities

DISSUASION | DELAY | DESIGN

Security level

*(when compared to other **high security fencing systems** options)*



Anti-ram barrier add on

M30, M40 and M50 Rated Anti-Ram Barriers can be integrated with the system to provide hostile vehicle mitigation along the perimeter fence line.

High security Guardian unions

Guardian Unions securely connect panels to high-strength horizontal rails within the Guardian Fence System® and is then secured with bolted steel straps adding additional rigidity to the fence.

Gates

Choose from a wide range of gate styles such as swing, v-track, cantilever and Crash-rated gates.

Reliable Safety Standard

The ASTM F2781 standard defines rigorous performance criteria for automated sliding gates used in high-security perimeter applications. The system we offer has been **tested and certified** in accordance with this standard, ensuring compliance with key safety, reliability, and operational requirements. This certification provides assurance that our solution meets the expectations of professionals securing sensitive or critical sites. Recognized in North America and internationally, ASTM F2781 compliance is a trusted mark of quality for motorized gate systems.

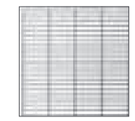
Coating

High quality galvanized steel and aluminum components deliver a longer service life. The Guardian® Fence System is also available with a superdurable, architectural grade powder coating. This prolongs protection against UV rays and salt spray.

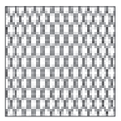
Guarantee

Backed by a 10-Year Manufacturer's guarantee.

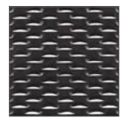
Available Infills



Welded Wire



Expanded metal



Louver Mesh

GUARDIAN® 5000 SPECIFICATION

Description	Name	Size	Screening %	% Open area
Welded Wire	DutyGuard 3-5-8	3" x 1/2" x 8ga	36%	64%
LouverMesh	LouverMesh 75	LouverMesh 75	75%	25%
LouverMesh	LouverMesh 94	LouverMesh 94	94%	6%
Expanded Metal	Sentry 34-9	3/4" x #9	32%	68%
Expanded Metal	Sentry 112-6	1-1/2" x 6"	31%	69%

Description	Name	Thickness		Lbs per 100 sq ft		Short opening size	Long opening size
		Strand width	Strand Thickness	Plain	Hot Dipped		
Welded Wire	DutyGuard 3-5-8	0.162		210	225	0.338	2.838
LouverMesh	LouverMesh 75	0.188	0.09	282	310	0.25	0.8
LouverMesh	LouverMesh 94	0.577	0.059	295	340	0.325	1.75
Expanded Metal	Sentry 34-9	0.15	0.135	180	198	0.688	1.562
Expanded Metal	Sentry 112-6	0.203	0.198	250	275	1.11	2.313

Additional options available. Contact us for a solution that meets your specific security requirements.

Guardian® 7000

An imposing high-security fencing system that provides unrivaled protection combined with integrated raceways for seamless security integration.

- ASTM F2781 tested and certified
- 4.5 minute Agressive threat delay**
- Easy installation, upgrade, repair and maintenance
- Seamless security integration
- 10 year warranty
- Anti-Ram barrier integrated into the fence or installed as a stand-alone solution

Benefits

ASTM tested protection
Independently tested and certifi ed to ASTM* standards for breakthrough and ballistic resistance. The Guardian 7000 series strongly resists both cutting attempts and ballistic attacks.

Engineered design
Steel rails within the Guardian® Fence System create a protective raceway for security component cabling such as intrusion detection, surveillance, and access control; providing a superior, fullyintegrated security barrier. The Guardian® Fence System allows for easy installation, upgrade, repair, and maintenance.

Anti-ram barrier add on available
M30, M40 and M50 Rated Anti-Ram Barriers can be integrated into the Guardian 7000 using the existing posts to provide hostile vehicle mitigation along the perimeter fence line.

Efficient installation
Panels are affixed to steel rails, which are attached to the steel posts. This smart fence platform configuration allows for fast installation – and means that exact post spacings are not a requirement.

*Tested in accordance with ASTM F2781 requirements
**Threat levels as determined by ASTM 2781 standard

Product detail

Functionalities

DISSUASION DELAY DESIGN ANTI-RAM

Security level

*(when compared to other **high security fencing systems** options)*

10

ASTM tested and certified panels

The Guardian 7000 System® features double layered mesh that increases both its deterrence and delay characteristics.
Tested to ASTM standards it is certified to deliver 4.5 min delay against aggressive threat level and over 14 minutes against Medium threat level. Additional mesh options are available.

High security Guardian unions

Guardian Unions securely connect panels to high-strength horizontal rails within the Guardian Fence System® and is then secured with bolted steel straps adding additional rigidity to the fence.

Gates

Strong and secure anti-cut, anti-climb, and anti-ram gates are available in a full range of styles.

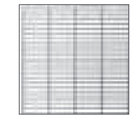
Coating

Guardian system panels and gates are standard with a superior galvanization, and are available with Betafence USA's exclusive Super-Durable powder coating. This coating provides longer protection from U.V. rays and salt spray than either E-Coat or standard polyester coatings.

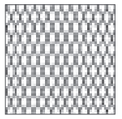
Guarantee

The Guardian Fence System® is backed by a 10-Year Manufacturer's guarantee.

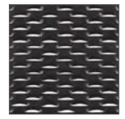
Available Infills



Welded Wire



Expanded metal



Louver Mesh

GUARDIAN® 7000 STANDARD MESH OPTIONS

Description	Name	Size	Screening %	% Open area	Thickness		Lbs per 100 sq ft		Short opening size	Long opening size
					Strand width	Strand Thickness	Plain	Hot Dipped		
Welded Wire	DutyGuard 3-5-8M	3" x 1/2" x 8ga Double Layer	50.4%	49.6%	0.162		315	338	0.338	0.338
MiniLouver 75	Minilouver 75	Minilouver 75	75%	25%	0.188	0.09	282	310	0.25	0.8
Expanded Metal	Sentry 34-9	3/4" x #9	32%	68%	0.15	0.135	180	198	0.688	1.562

Additional options available. Contact us for a solution that meets your specific security requirements.

STANDARD OPTIONS

Height	Security Mesh	Guardian Union	Rails		Anti-Ram Barrier
			Galvanized Finish	Powder-Coated	
8' through 24'+	M75 DutyGuard 3-5-8M (double layer) as standard - other options available	GU H-S	Rail sizes specified by a professional engineer based on height, wind load and soil conditions	Post sizes specified by a professional engineer based on height, wind load and soil conditions	M30, M40, M50

Securifor® Defender

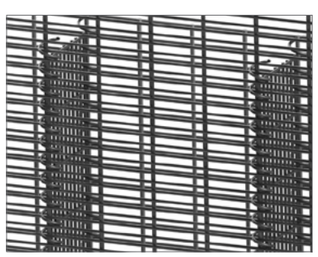
The Securifor® Defender system is an independently tested and certified high security anti-grind, anti-climb delay fencing system.

Benefits

- ASTM F2781 forced entry resistance certified
- Exceeds ASTM forced entry resistance requirements – minimum of 6.8 minutes aggressive threat delay
- Over 40% visibility index ensuring good visibility when combined with surveillance cameras
- The fence is made up of two panels with integrated vertical panels to reinforce the cavity
- Integrated fixators securely connect the front and back panels
- Compatible with detection technologies
- Easy and fast to install
- Retro fit possibilities

Visit the Betafence YouTube channel to watch the **Securifor Defender** video

Product detail



Functionalities

DESIGN | DISSUASION | DELAY

Security level

*(when compared to other **high security fencing systems** options)*

10

Tested and certified

Securifor Defender is independently tested at an accredited ASTM testing facility and is certified to ASTM F2781 standards as follows:

Threat level	ASTM requirement	Structured test	ASTM Rating	Used tools
Low	N/A	Exceeded	16.7 minutes	Hammer/saw/ crowbar
Medium	10 minutes	Exceeded	13 minutes	Bolt cutter/ angle grinder
Aggressive	5 minutes	Exceeded	6.8 minutes	Gasoline-powered angle grinder

Anti-personnel fence solution

Securifor Defender exceeds ASTM forced entry resistance requirements and its small apertures make climbing or scaling the fence virtually impossible.

Tested to ASTM standards, Securifor Defender is the ideal fencing solution for high security applications such as:

- Oil and gas
- Critical Infrastructure
- Industrial facilities
- VIP protection
- Military facilities

The system

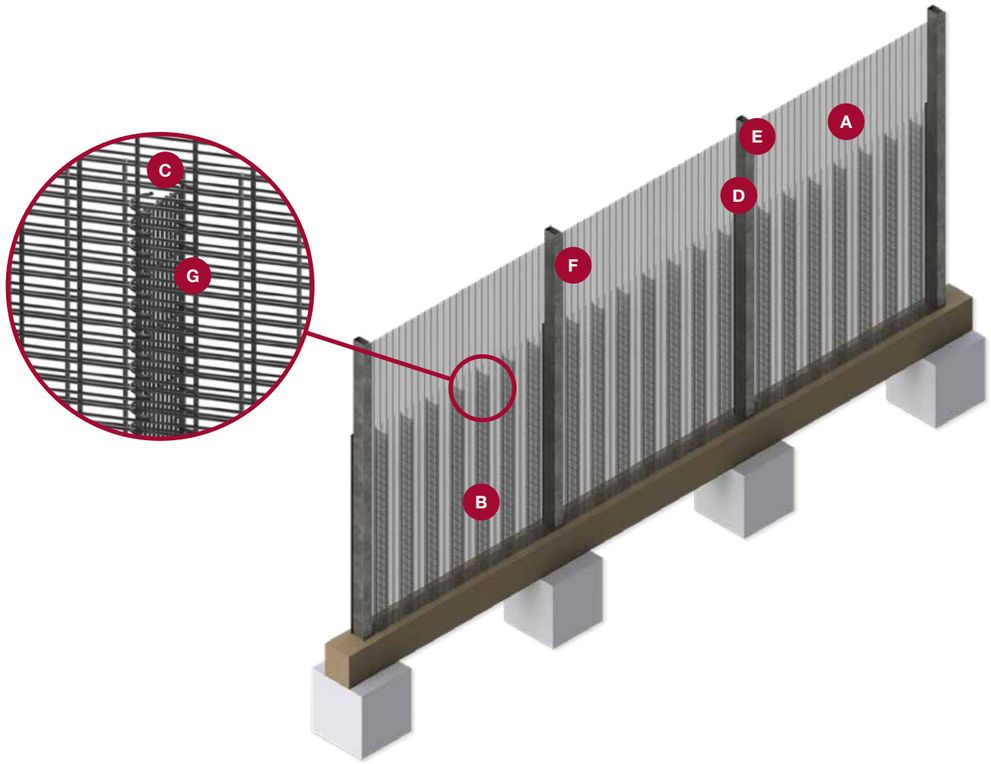
To increase resistance to forced entry attempts, our modular cassette design consists off:

- Two attack mitigation fence panels front and back
- Vertical separator panels to strengthen the cavity
- A cover plate and one way security bolt to fix the panels to the posts.
- Optional extras like razor tape wire or barbed wire

Parts

The unique and patented system consists of:

A. Securifor Defender flat front panels
B. Securifor Defender flat back panels
C. Securifor Defender flat vertical panels
D. Rectangular posts
E. Coverplates
F. One way bolts
G. Spirals to connect front and back panel



Securifor® Aman

(Anti Personnel Delay Fence) Ultimate HCIS compliant fencing solution Securifor® AMAN 7 is an HCIS compliant anti-personnel fence certified to exceed category 1 & 2 forced entry resistance requirements.

Benefits

- Securifor® AMAN is independently tested at an accredited ASTM testing facility and is certified to ASTM F2781 standards.
- Exceeds HCIS forced entry resistance requirements
- Single layer panel
- 38% Visibility Index - The best in the market
- Integrated fixing mechanism
- Good visibility when combined with surveillance technology
- Compatible with detection technology
- Easy to install

Product detail

Functionalities

DESIGN | DISSUASION | DELAY | ANTI-RAM

Security level

*(when compared to other **high security fencing systems** options)*

10

Tested and certified

Securifor® AMAN is independently tested at an accredited ASTM testing facility and is certified to ASTM F2781 standards.

Anti-personnel fence solution

Securifor® AMAN exceeds HCIS forced entry resistance requirements as well as mitigating scaling attempts.
Tested to ASTM standards, Securifor® AMAN is the ideal fencing solution for applications such as:

- Oil & Gas
- Critical Infrastructure
- Industrial Facilities
- VIP Protection

HCIS Class 1

Class 1 is met when the Anti Personnel Fence is installed with an M50/P1 AVB (Anti Vehicle Barrier).
CRASH RATED barrier (AVB AND APF) Blokad Crash-rated barrier is ASTM F2656 M50/P1 (K12) & M40/P1 (K8) certified.
The highest rating M50/P1 is certified to stop a vehicle with gross weight of 6,800kg driving at a speed of 80km/h from penetrating a secured area, with a measured penetration beyond the inside perimeter of the barrier not exceeding 1.0 metre.

HCIS Class 3 and 4

Betafence can offer chainlink and concertina wire to meet Class 3 and Class. Concertina barbed wire systems are an effective deterrent to climbing the fence.
Our coating technology guarantees a long product lifetime even in corrosive environments.

The System

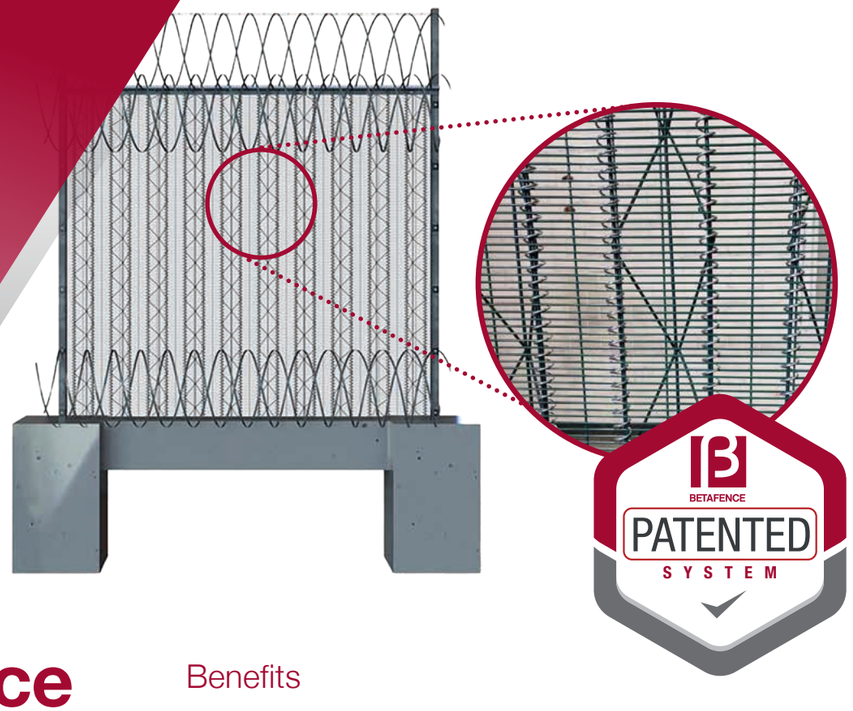
Designed to resist forced entry attempts, our modular design consists of:

- Single attack mitigation fence panel
- Vertical reinforcing panels
- Spiral connectors
- Anti-tampering fixation connectors
- 10 year warranty, even in the most aggressive environments

Parts

The unique engineered design consists of:

- Securifor® fence panels
- Rectangular posts
- Anti tampering fixators



Betafence TriMax® Anti-Personnel Fence

Betafence TriMax® is an HCIS compliant Anti-Personnel Fence certified to exceed Category 1 & 2 forced entry resistance requirements.

Benefits

Betafence TriMax® harnesses the power and strength of its unique triangular structure to deliver significant benefits versus standard HCIS compliant systems:

- The TriMax patented triangular post system provides the highest level of strength and rigidity in the market withstanding wind speeds of upto 200km/hour.
- The TriMax system provides layers of protection which exceed the HCIS forced entry requirements; delay of over 18 minutes using medium aggressive tools, and over 8 minutes with highly aggressive tools.
- With fewer solid posts needed, the unique TriMax system offers the most superior visibility in the market at 39.63%.
- The triangular wire posts ensure that visibility is maintained at all angles which means less cameras are required to cover an area.

- Betafence TriMax® is independently tested, and certified to ASTM F2781 standards.

- It is an HCIS compliant anti-personnel fence certified to exceed Category 1 & 2 forced entry resistance requirements.

- The system can be packed efficiently for transportation - there is less material and the panels can nest to maximise space in containers.

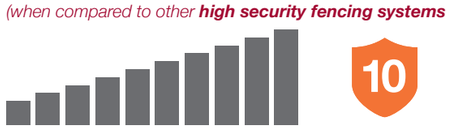
Product detail

Functionalities

DISSUASION · DELAY · DESIGN · ANTI-RAM

Security level

*(when compared to other **high security fencing systems** options)*



Tested and certified

Betafence TriMax® is independently tested at ASTM testing facility and is certified to ASTM F2781 standards. It is an HCIS compliant anti-personnel fence certified to exceed Category 1 & 2 forced entry resistance requirements.

Anti-personnel fence solution

Betafence TriMax® exceeds HCIS forced entry resistance requirements as well as mitigating scaling attempts. Tested and certified to ASTM standards, is the ideal fencing solution for applications such as:

- Oil and Gas
- Critical Infrastructure
- Data Centres
- Water Treatment Centres
- Electric Energy Stations

The Patented Triangular System

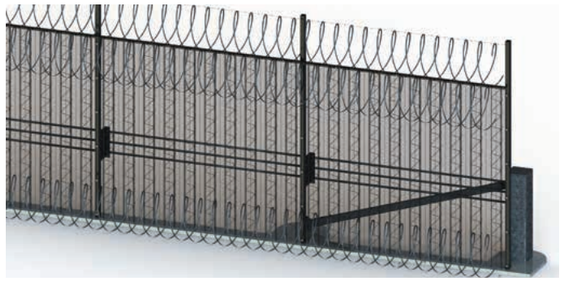
The Betafence TriMax system's patented triangular structure provides unmatched strength and rigidity, making this the strongest, HCIS compliant fence on the market.

- Anti cut and anti climb mesh fence panels
- Resistance to forced entry is improved further by the additional triangular mesh layers
- Anti tampering fixators
- Up to 10 years warranty in even the most aggressive environments
- The triangular post structure provides market leading resistance to external forces

HCIS Class 1 and 2

Class 1 and 2 are met when the TriMax system is installed with an M50 P1 AVB (Anti Vehicle Barrier).

CRASH RATED FENCE (AVB AND APF)
The Betafence Blokad Crash-rated fence is ASTM F2656 M50/P1 (K12). The rating M50/P1 is certified to stop a vehicle with gross weight of 6,800kg driving at a speed of 80km/h from penetrating a secured area, with a measured penetration beyond the inside perimeter of the barrier not exceeding 1.0 metre.



HCIS Class 3 and 4

Betafence can offer chainlink and concertina wire to meet Class 3 and Class 4.
Concertina barbed wire systems are an effective deterrent to climbing the fence. Our coating technology guarantees a long product lifetime even in corrosive environments.

ASTM F2656:

Standard Test Method for Crash Testing of Vehicle Security Barriers

ASTM F2656 certifies the performance of a barrier or fence in stopping a vehicle from crashing through it at high speed.
The test measures the speed and size of the vehicle and how far it gets past the barrier after impact.

If the system passes, it's proved strong enough to protect people and property from vehicle attacks or accidental crashes.

This certification is often required for high-security sites like government buildings, airports, and military bases.

Betafence ASTM F2656 Certified Crash Rated Products:

- Blokad Crash Rated Barrier
- Blokad Static Bollard
- Blokad Crash Rated Sliding Gate
- Future Wedge 2400
- Future Wedge 3600

In addition, our HESCO business has an ASTM F2656 Certified Surfact Mounted Crash Rated Barrier System:

- HESCO TERRABLOCK XV

HESCO's Terrablock XV combines surface-mounted barrier protection with mesh engineering for high security for people and places. With its patented Energy Transfer System, TERRABLOCK stops hostile vehicles from accessing critical infrastructure.

BLOKAD® crash-rated barrier

This crash-rated barrier is a certified system to withstand the impact of a vehicular attack on sensitive sites, borders and high risk industries.

ASTM INTERNATIONAL

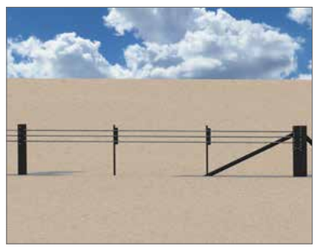
Benefits

ASTM F2656 Crash-Tested and Certified Anti-Ram Barrier
Our anti-ram fence systems are designed to stop vehicular threats and protect sensitive perimeters. Fully tested and certified according to ASTM F2656, the benchmark standard for vehicle impact resistance, these systems meet defined penetration ratings based on vehicle type, speed, and impact conditions. This certification ensures that the solution delivers proven performance against forced vehicle entry, offering reliable protection tailored to your desired security level.

Cost-effective
Specifically designed for it's arresting capabilities and maximum security while also offering ease of installation and a cost effective solution for the protection of high value assets.

Stopping power
Different configurations of the BLOKAD crash-rated system are available allowing for a solution that fits your security needs at all times.

Product detail



Functionalities

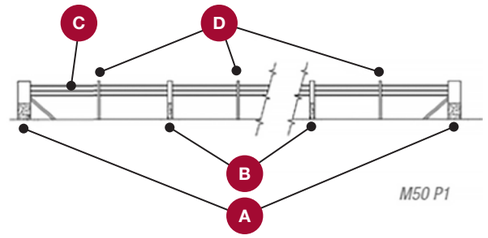
DISSUASION ANTI-RAM

Security level

*(when compared to other **crash rated barrier** options)*

10

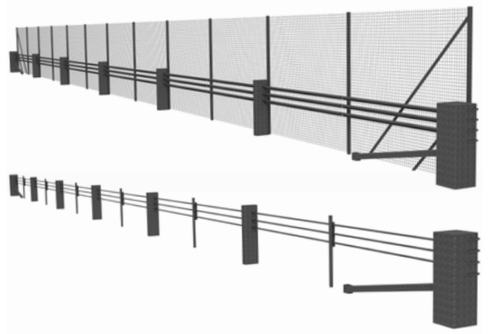
Simple three-cable design



A. Terminal post
B. Line post
C. Three cables
D. Intermediate line or fence post

Variants

The anti-ram three-cable barrier system can be integrated into all types of fencing systems, combining an aesthetically attractive look with an immense anti-ram force protection.

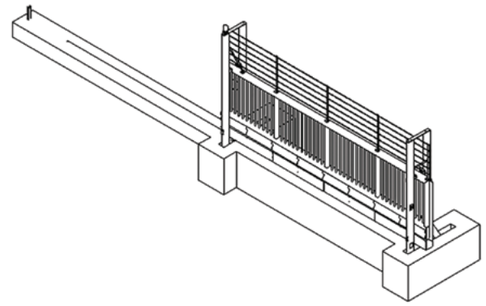


There are also two types of installation for the posts: a standard installation and a shallow-mount installation.

Crash test

Full system

In line with the anti-ram performance of the fence, a corresponding crash-tested and certified sliding gate ensures the same anti-terrorist force protection at the access points of the perimeter.



Coating technique

Galvanised and optionally Polyester coated for long life protection.

Crash tested and ASTM certified Anti-ram performance

In order to ensure proper performance, each type of anti-ram barrier has an authentic crash test certificate mentioning the impact conditions and penetration rate of the applicable rating system (ASTM F2656).

American society for testing and materials (ASTM F2656)*			
Betafence anti-ram type	**Test vehicle weight (kg)**	**Normal impact speed (km/h)**	**Penetration rate (m)**
M50 P1/P2/P3	6800	80	P1 <= 1 P2 <= 7 P3 <= 30
M40 P1/P2/P3	6800	64	P1 <= 1 P2 <= 7 P3 <= 30
M30 P1/P2/P3	6800	50	P1 <= 1 P2 <= 7 P3 <= 30

BLOKAD® static bollards

PAS 68 crash-tested hostile vehicle mitigation

The BLOKAD static bollard range provides enhanced pedestrian and asset protection against vehicular attacks.

Benefits

Reliable Protection
BLOKAD static bollards protect pedestrians, buildings, and perimeters against vehicle-borne attacks, even when only one bollard is impacted. The system has been crash-tested and certified in accordance with ASTM F2656, ensuring proven resistance to vehicle impacts based on defined penetration levels, vehicle types, and speeds. This certification guarantees reliable performance in hostile vehicle mitigation and supports the protection of high-risk or sensitive areas.

PAS 68 crashtested hostile vehicle mitigation
Independently tested to PAS 68 criteria all models completely immobilised the vehicle, removing the possibility of a second ram attempt.

Three crash rating options
Three BLOKAD static bollard model options are available depending on the protection level required.

Flexible spacing
All three BLOKAD static bollard crash ratings were obtained on a single bollard hit. This allows for flexibility in spacing bollards in the field.

Guarantee
Corrosion guarantee varies depending on installation location and applied PES coating.

Functionalities

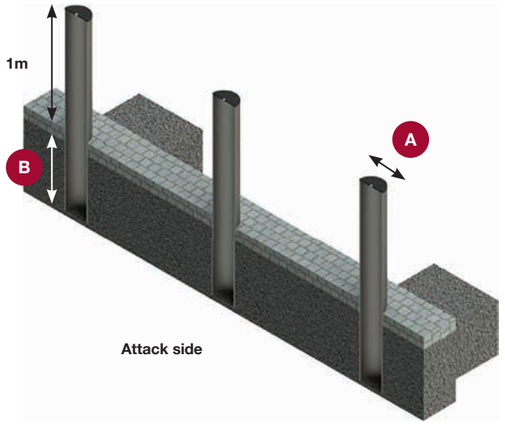
DISSUASION ANTI-RAM

Security level

*(when compared to other **access control** options)*

10

Cross section



Coating technique

Hot-dip galvanised complies with BS EN ISO 1461:2009.
Average galvanising coating thickness of 610g/m.

Colours

Anthracite RAL 7016. Other colours are available on request.

Reliable Safety Standard

The ASTM F2656 standard defines rigorous performance and impact resistance criteria for barriers and perimeter security systems designed to stop vehicle-based threats. The system we offer has been tested and certified in accordance with this standard, ensuring it meets strict requirements based on vehicle type, speed, and penetration level. This certification provides assurance that our solution delivers proven protection against forced vehicular entry, making it ideal for sensitive or high-risk sites. Recognized in North America and internationally, ASTM F2656 compliance is a trusted mark of quality in anti-ram security solutions.

BLOKAD® static bollards range

Type	Height (m)	Diameter - A (mm)	Foundation depth - B (mm)	PAS 68 classification
BLOKAD Static 30	1	219	600	2007 V/7500(N3)/48/90:0.0/0.0
BLOKAD Static 40	1	273	750	2007 V/7500(N3)/64/90:3.3/0/0
BLOKAD Static 50	1	273	750	2007 V/7500(N3)/80/90:10.6/11.1

BLOKAD® crash-rated sliding gate (7M)

A sliding gate to prevent the intrusion of vehicular attacks on sensitive sites, at borders and in high risk security environments.

Benefits

Unparalleled security
The Betafence BLOKAD sliding gate is rigorously tested and certified to the PAS 68 standard, ensuring superior crash resistance against hostile vehicle mitigation threats. Its proven impact resistance guarantees maximum safety for high-risk areas.

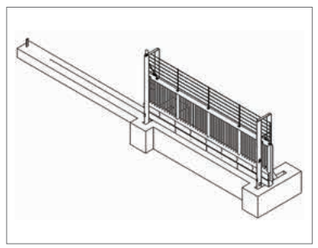
Engineered for strength
Built with robust materials and cutting-edge design, the BLOKAD gate is designed to stop vehicles in their attacks, offering unmatched durability and reliability. It's an ideal solution for critical infrastructure and sensitive sites.

Efficient operation
Featuring smooth, precision-engineered sliding mechanisms, the gate combines strength with ease of use. Its optional reliable motorisation and user-friendly control systems ensure seamless operation every time.

Customisable design
The BLOKAD gate is available in a range of sizes and finishes to match the aesthetic and security requirements of any site. Tailor it to meet specific operational or environmental needs without compromising its certified crash rating.

Proven performance
Independently tested and certified against the stringent PAS 68 standard, this sliding gate has demonstrated its ability to withstand high-energy impacts. Trust in a product that delivers peace of mind where it matters most.

Product detail



Functionalities

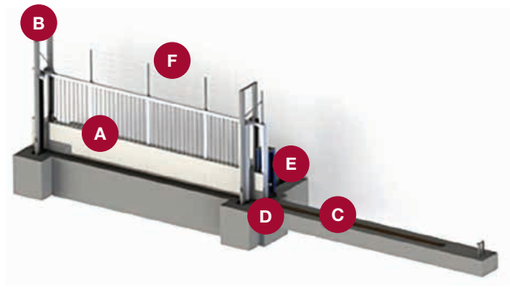
DISSUASION
ANTI-RAM

Security level

*(when compared to other **access control** options)*

10

Components



A. Wing with integrated wheels
B. Gate posts (guiding post and lock post)
C. Rail
D. A chain holder for the movement
E. Optional motor (motor and controller built in separate cabinet)
F. Barbed wire and/or razor tape

Motor and gear box specifications

- The motor supplied pre-mounted in the cabinet is suited to be used in high temperature environments
- The rated power of the motor will be 1.5kW three phase 400V 50Hz
- The motor will be connected directly to the gear box
- The gear box is a heavy duty 90° gear box with a mechanical friction clutch
- Eliminating the friction with a special bolt will allow the gate to be moved manually; this is in the case of emergency or power shortage

Power supply	400V a.c. 50Hz
Motor voltage	400V a.c.
Max current consumption (excl. equipment)	5A
Gear wheel	Z17m6, Ø114mm
Speed	9m/min
Torque	300Nm
Max drive	60m
Duty cycle in S3 mode	80%
Temperature range	-20°C to +50°C
Protection class	IP44

Motorised execution

Safety equipment
The safety equipment is wired up to the controller located inside the cabinet:

- Safety edges on every post and each side of the leaf
- Two sets of photocells
- One key switch with O-S-C function (open-stop-close)
- One key switch with O-C-ES function (open-close-emergency stop push mushroom button) installed on the cabinet

The wing

The welded gate frame consists of a rectangular horizontal tube and vertical rectangular tubes. The infill consists of welded vertical rectangular tubes with a max. distance between the bars of 120mm.
Optional bent arms are added to the top of the frame to attach barbed wire or razor tape.

Metallic and polyester coating

PES

Wing and posts are made out of steel beams of different dimensions which are hot-dip galvanised and optionally polyester coated afterwards.

Tested and approved solution

The gate is full-scale crash-tested according to PAS 68 standard and achieved a rating of: PAS 68:2010 V/7500(N3)/80/90:0.0/2.6. Crash report available on request.

Full system available

In line with the anti-ram performance of the sliding gate, a corresponding BLOKAD crash-rated barrier – tested and certified according the ASTM standards – ensures the same protection level around your site. Additionally a BLOKAD tested and crash-rated wedge is also available to complement your desired security needs.

BLOKAD® crash-rated sliding gate (7M) technical specifications	
Free opening	7000mm
Under beam	Welded construction (450 x 250mm)
Outer frame	Rectangular profile 120 x 80mm
Inner support frame	80 x 3mm
Infill tubes	Rectangular profile 30 x 20mm; distance between infill tubes: max. 120mm
Posts	Rectangular tubes (200mm) equipped with a catcher and base to guide and support the wing when the gate is closed

Future Wedge® 2400

Surface-Mounted Design
Multiple Control Options
Integrated Gate Arm
Stand Alone System

ASTM INTERNATIONAL

Benefits

ASTM-PU40 Crash Ratings
Provides effective protection against unauthorized vehicle entry and exit attempts, making it ideal for parking and car rental facilities. The barrier features a wide range of operational options depending on your traffic scenario and specific security requirements.

Built For Integration
The Future Wedge 2400 utilizes sophisticated PLC and VFD drives for customized operation and communication. The PLC easily integrates the barrier with other perimeter security systems such as speed detection, access controls, traffic loops, automatic doors, CCTV, gates, and other intrusion detection devices.

Applications
Car Rental Facilities | Parking Garages | Corporate Buildings | College Campuses | Federal Buildings | Municipalities | Courthouses | Stadiums | Airports

Surface-Mounted Installation
Features easy and simple installation with its bolt down, surface-mounted design.
No need for excavation and other costly construction requirements. Future WEDGE 2400 series is laid into place and can be operational within one working day minimizing costs, lane closures and operation downtime.

Product detail

Functionalities

DISSUASION ANTI-RAM

Security level

*(when compared to other **access control** options)*

10

Reliable Safety Standard

The ASTM F2656 standard defines rigorous performance and impact resistance criteria for barriers and perimeter security systems designed to stop vehicle-based threats.
The system we offer has been tested and certified in accordance with this standard, ensuring it meets strict requirements based on vehicle type, speed, and penetration level.
This certification provides assurance that our solution delivers proven protection against forced vehicular entry, making it ideal for sensitive or high-risk sites. Recognized in North America and internationally, ASTM F2656 compliance is a trusted mark of quality in anti-ram security solutions.

SPECIFICATIONS BY MODEL

Product	Foundation Depth	Plate Height	Road Width	Crash Ratings
SMS 2408	6" (152MM)	24" (610MM)	UP TO 13' (3.96M)	ASTM-PU40 5,070 LBS. @ 40 MPH*
SMS 2410	6" (152MM)	24" (610MM)	UP TO 15' (4.57M)	ASTM-PU40 5,070 LBS. @ 40 MPH*
SMS 2412	6" (152MM)	24" (610MM)	UP TO 17' (5.18M)	ASTM-PU40 5,070 LBS. @ 40 MPH*

*6,800 KG. @ 64 KPH,| **31" H PLATE ALSO AVAILABLE

Future Wedge® 3600

Flush-Surface Design Shallow 15” Barrier Depth M50/P1 K12 Certification Environmentally Preferable All-Electric Drive Designed For Integration

ASTM INTERNATIONAL

Benefits

All-Electric Operation
The Future WEDGE 3600 features an all-electric drive with no hydraulic or hazardous fluids, making it an environmentally preferable choice. Common breakdowns and worn components associated with traditional hydraulic systems are drastically reduced. The electro-mechanical drive delivers smooth, quiet, and trouble-free operation and reduces maintenance significantly.

Built For Integration
The Future WEDGE 3600 utilizes sophisticated PLC and VFD drives for customized operation and communication. The PLC easily integrates the barrier with other perimeter security systems such as speed detection, access controls, traffic loops, automatic doors, CCTV, gates, and other intrusion devices.

Applications
Petrochemical Facilities | Nuclear/Energy Sites | Defense Facilities | Embassies | Airports/ Seaports | Federal Agencies | Data Centers | Water Treatment Facilities | Logistics/ Transport Hubs

Crash Tested & Certified
The FutureWEDGE® 3600 is a final denial all-electric barrier that is the technological choice for integration. Certified to provide maximum protection at the ASTM M50 P1 (K12) certification levels. Independently crash tested by authorized third parties, it stopped a medium-sized truck traveling at 50mph within 3.3ft.

Product detail

Functionalities

DISSUASION ANTI-RAM

Security level

*(when compared to other **access control** options)*

Reliable Safety Standard

The ASTM F2656 standard defines rigorous performance and impact resistance criteria for barriers and perimeter security systems designed to stop vehicle-based threats.
The system we offer has been tested and certified in accordance with this standard, ensuring it meets strict requirements based on vehicle type, speed, and penetration level.
This certification provides assurance that our solution delivers proven protection against forced vehicular entry, making it ideal for sensitive or high-risk sites. Recognized in North America and internationally, ASTM F2656 compliance is a trusted mark of quality in anti-ram security solutions.

SPECIFICATIONS BY MODEL

Product	Foundation Depth	Barrier Depth	Plate Height	Road Width	Crash Ratings
SHF 3610	15” (381 MM)	12” (304MM)	36” (915MM)	UP TO 16’ (4.9M)	M50 P1 15,000 LBS. @ 50MPH*
SHF 3612	15” (381 MM)	12” (304MM)	36” (915MM)	UP TO 18’ (5.5M)	M50 P1 15,000 LBS. @ 50MPH*
SHF 3614	15” (381 MM)	12” (304MM)	36” (915MM)	UP TO 20’ (6.7M)	M50 P1 15,000 LBS. @ 50MPH*

*6,800 KG. @ 48 KPH, **6,800 KG. @ 64 KPH

SECURITY BARRIERS

TERRABLOCK™ XV 4

TERRABLOCK XV is a patented, rigid-faced, anti-climb security barrier which integrates a unique mesh configuration with Hesco's surface mounted technology.

TERRABLOCK XV incorporates a unique combination of HESCO® geotextile lining with specially configured, rigidized mesh, to provide a high, anti-climb security barrier that is entirely surface mounted.

A development of Hesco's successful TERRABLOCK range of fencing and accessories, XT is delivered flat packed and a single unit at 7' (2.12m) in length can be erected and assembled in minutes, ready for filling. As with all HESCO® products, TERRABLOCK XV is completely modular and other units can be connected to create barriers of limitless length. Other heights are available, on request.

The aesthetic appearance of XV is one of its key advantages that will allow it to integrate unobtrusively into natural and built environments. The powder-coated finish to the mesh components, the concealment and containment of fill by Hesco's geotextile liner and the sharp planes defined by the rigid mesh components make XT ideal for temporary or permanent security barriers, for many kinds of application.

RELIABLE SAFETY STANDARD

The ASTM F2656 standard defines rigorous performance and impact resistance criteria for barriers and perimeter security systems designed to stop vehicle-based threats.

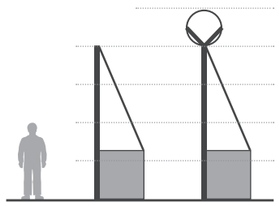
The system we offer has been tested and certified in accordance with this standard, ensuring it meets strict requirements based on vehicle type, speed, and penetration level.

This certification provides assurance that our solution delivers proven protection against forced vehicular entry, making it ideal for sensitive or high-risk sites. Recognized in North America and internationally, ASTM F2656 compliance is a trusted mark of quality in anti-ram security solutions.

1 ..... Spiral-hinged corners

2 ..... Anti-climb mesh front

3 ..... Welded mesh construction



The product featured in this publication is available in a variety of finishes and configurations, offering a typical design life of up to 10 years depending on atmospheric environment, and comes with a 2 year warranty, subject to Hesco's terms and conditions.

For more information about our products and TERRABLOCK XV, contact us direct or visit our website at: hesco.com

PRODUCT	HEIGHT	WIDTH	LENGTH
XT 4 M50P1	13'1" (4m)	4'6" (1.37m)	7' (2.12m)
XT 4+ M50P1	16' (4.9m)	4'6" (1.37m)	7' (2.12m)

Securing what matters most is the core of what we do, and we are focused on securing assets and keeping facilities a safe environment for everyone.

Our Security Experts can help you choose a perimeter security solution that is engineered to withstand forced entry, mitigate scaling and trespassing.

BETAFENCE
a PRÆSIDIAD brand

Securing What Matters