

# High Security Integrated Solutions





# Zaun Group

## Setting new boundaries in border control

The Zaun Group are the only company able to offer a full turnkey solution, with an extensive range of innovative products for almost any high security problems.

Zaun's ethos is simple - to design and manufacture the best perimeter security systems available. We achieve this through investing continually in the maintenance of existing and procurement of new production machinery. This always keeps us one step ahead of the competition in terms of efficiencies in production, environment processes and flexibilities in production - this ensures our fully integrated systems are always at the cutting edge of technology.

Zaun's products are manufactured in purpose built facilities within the United Kingdom. All our facilities are accredited to ISO9001 standards.

Combined with our can-do attitude in production, Zaun's turnkey package ensures at every stage of the design, production and managed installation process; our products are delivered and installed to the highest standards.

Our highly skilled product and technical development teams, continue to develop solutions to enhance our range of products as well as designing bespoke products and solutions for our customers. These products are designed to work seamlessly with our standard systems.

Our technical design and manufacturing capabilities ensures that we can combine our sales functions with tailored specifications and give product advice as well as developing CAD designers, 3D illustrations and technical drawings.

Through supplying such quality products and overall service, Zaun have supplied products to some of the most prestigious sporting and high security applications across sites in Europe, Australasia, The Middle East and South America.







# Zaun Group Core Values of Company

#### **Our Mission**

At Zaun Limited, it is our mission to be the fencing supplier of choice, providing value through effective delivery of products and services. We want our customers to be delighted with the products and service they receive from us, so that we are their natural choice for fencing.





### **Our Core Values**

As we grow as a company, it has become more and more important to explicitly define the core values from which we develop our culture, our brand, and our business strategies.

These are the five core values that we live by, throughout the Zaun Group;

- A Positive Customer Experience
- Professional
- Ambitious
- Innovative
- Responsive

# Zaun Group Business Statement

Having recognised a gap in the market, the Zaun Group has been created as a specialist supplier, installer and integrator of physical perimeter protection systems. Today our competitors still struggle to keep up with the level of innovation that Zaun has brought to the market.

In that time Zaun has evolved from a mesh supplier to a provider of complete fencing solutions on an international scale. We pride ourselves on our unique ability to provide assistance from the planning stages of a project - undertaking the design, manufacture and final installation of the system.

We are renowned for our ability to implement solutions for technically demanding sites.

Continuous investment in people and technology means that Zaun remains at the forefront of the fencing industry. Our mesh manufacturing division is now well established and has enabled us to not only develop the widest range of products on the market, but also to develop better performing products at lower costs. Able to produce large or small quantities, it has ensured that Zaun is popular throughout the high security, corporate, residential and local authority sectors.

Further investment in our woven mesh, welded mesh and railing systems, has seen Zaun's market share increase and we will continue to invest to ensure that Zaun continue to offer the best and most innovative products available.

Our expansion in our ranges has ensured that we can cater for requirements ranging from general perimeter security to the most sensitive of environments.



# Zaun Group Installation & Project Management



### Design

Zaun Group design team would look at all aspects of a project's requirements and the develop effective and innovative solutions, including:

- Detailed site surveys
- Design assessments
- Security systems
- Product integration & specification
- Development of plans
- CAD drawings, site plans & calculations

### **Perimeter Security Surveys**

Our on-site Perimeter Security Surveys are guaranteed to quickly identify site specific requirements, safely and effectively highlighting ways to reduce your risks and secure the site appropriately.

Zaun Group will carry out a full specific survey of your site to assess your potential requirements and provide the best solutions to suit your site, offering advise on the best product to suit your requirements and installation/site limitations.



## **Project Management**

Our team of project managers can handle all aspects of your perimeter installation project from conception to completion and hand over.

- Site Supervision
- Health & Safety Management
- Risk and Health & Safety
- Systems Integration
- Management of Sub-Contractors
- Commissioning
- Project Handover to Client on Completion

#### Installation

Our reputation of supplying and installing high security fencing systems, to meet the standards of BS1722, PAS and the security criteria is second to none.

We have installed perimeter protection systems for some of the most high profile sites around the world including London Olympic Games 2012, Commonwealth Games 2014, NATO Summit, G8, NSS, Oil, Gas, Power and Utility sites, Airports, Prisons and Borders.



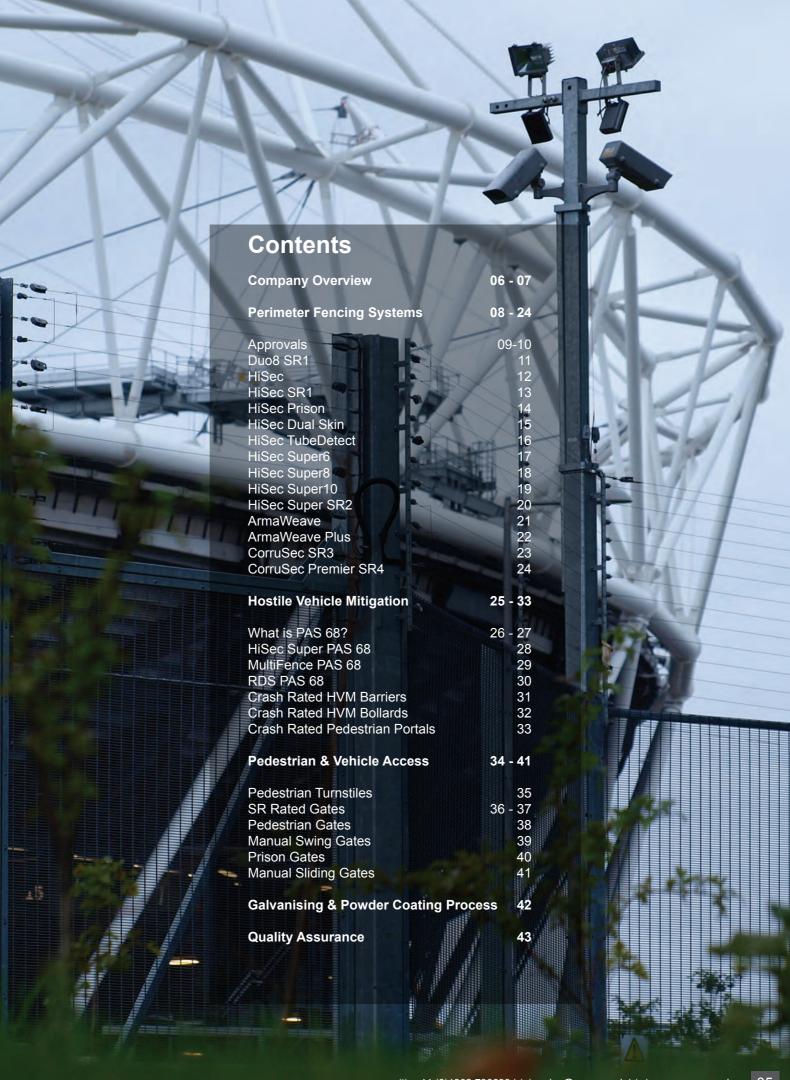
All of the Zaun Group are committed to ensuring that our customers receive the highest standard of service at all times, from the initial conception and design through to completion and hand over.

Our experienced staff pride themselves in being able to deal with the most complex of projects, which are often of a restricted nature. We operate a Quality Assurance System registered with and conforming to BS EN ISO 9001:2016, CHAS, Achillies and constructionline standards ensuring that the highest level of workmanship is achieved at all times.

### Maintenance

Zaun Group offers bespoke security maintenance contracts tailored to meet the customer's own requirements.

Our technical ability, experience and knowledge of the industry make it possible to extend the scope and capacity of protective security measures for almost any environment.





# Company Overview The Zaun Edge

With Zaun, you really can have it all - the widest range, the best service, the highest quality products, the first to market, bespoke solutions and customer support.

Our designers use the latest research and development to create bespoke product solutions for customers overcoming some of the most challenging installation and design requirements.

Zaun offers such exceptional levels of customer service at every stage of the supply chain process. Our sales and technical teams work hand in hand with our design department to develop innovative, cutting edge product solutions for our customers

and provide all the technical, product knowledge and support you could possibly need.

Zaun invests continually in the procurement of new and maintenance of existing production machinery. This keeps us one step ahead of the competition on production flexibility, efficiency and environmental performance. Our factories and manufacturing processes are accredited to ISO9001 standards.

Zaun's integrated solutions are specified by British and overseas government institutions along with prisons and leading sporting events. Our systems are chosen as they boast some of the highest security standards available including CPNI, Secured By Design, BRE Security Rated products to LPS1175 and PAS 68 crash rated solutions.

We ensure we are at the forefront of the perimeter protection industry by taking a leading role in many trade organisations. Our role in the Perimeter Security Suppliers Association (PSSA) as a founder member demonstrates this level of involvement.

Whichever way you look at it, Zaun has the edge in perimeter protection.







# Company Overview Why Zaun?

One of the largest and most dynamic British manufacturers of high security perimeter protection systems. Zaun's comprehensive range of solutions combats the rapidly changing security threat, and ensures our systems meet the perimeter security requirement for any site. Tested by independent organisations and governments to the most stringent criteria, our systems protect sites of critical national importance on a global scale.

# INDUSTRY **LEADER**

# **LEADING**PRODUCTS

Zaun has an unrivalled history of developing and manufacturing industry leading perimeter systems. Our high security systems have been subjected to the most stringent test conditions from HVM fencing systems, barriers, bollards and gates to security rated fencing and gate system protected against physical attacks and breaches. Our perimeter systems include everything from fences, gates, bollard and barriers to PIDS, access control, RADAR and CCTV cameras with video analytics

Worldwide Zaun Group has regional sales offices in several destinations in the United Kingdom (including Wolverhampton, London & Surrey), France, Sweden, Spain, Italy, United Arab Emirates and Australia. Our manufacturing plants are based at our Head Office in Wolverhampton, UK and Dubai, UAE.

# REGIONAL OFFICES

# STATE-OF-THE-ART MACHINERY

Our Manufacturing plants include a range of welded mesh and woven mesh production equipment, tube and laser cutters and plasma cutting machines, all designed and tweeked to specifically produce our vast range of bespoke and standard manufactured perimeter systems.

Since 1996 Zaun have been manufacturing industry leading perimeter and sports fencing solutions to serve markets around the world, ranging from sports fencing for schools and sports clubs, to perimeter security for utilities, prisons, airports and military bases. Our systems have been used at some of the world's most prestigious major events including the Olympic Games, G8, NSS & NATO Summits and sites of national importance such as the Meydan Racecourse in Dubai, KOC in Kuwait & PDO Oil in Oman.

20 YEARS









# Perimeter Fencing Systems

## Guidance of Security Key;

To help guide you through our range of fencing solutions, we have given indications of the security ratings for each of our products to help in the specification of these materials. These ratings consider the forcible attack times taken during internal resting of our products.

Basic level of security - Level 1 **Ultimate level of security - Level 5** 











# **Perimeters without limits**

Zaun truly leads the field in high security fencing solutions. Our products have been tested to maximum-security installation requirements independent by organisations to enable them to be specified on sites of critical importance as they exceed the most stringent intruder-resistance requirements.

Zaun was the first company to manufacture an integrated PAS 68 (Publicly Available Specification) fencing solution. This patent pending design is the world's first product to achieve a crash rating fence with zero penetration. The zero penetration system uses new technologies to nullify attack by vehicles.

Our **ArmaWeave** design achieve the highest rating for defence against forcible attack and can be raked, limiting the need for stepping panels across undulations in ground levels. Another Secured by Design product, HiSec Super 6, has a close mesh that is very difficult to climb and cut through with anything but power tools.

This enable us to provide a complete range of solutions to meet the security requirement for any high security perimeter application.

## **Approvals**

# LPS1175 Security Ratings (SR)



BRE LPS1175 is an independently tested rating that covers the broadest scope of physical security products and services of any publicly available standard in the world. This standard comprises of security ratings with test requirements of ascending intensity. These are measuered in terms of attack tools and time available to the attacker, and enables specifiers to select products according to the risks that they and their property face. LPS1175 can be used in a range of applications, from residential right through to critical infractructure projects.

Level of Risk	Security Rating to LPS1175	Resistance provided
	SR5	Providing high levels of resistance to professional means of attempted forced entry using a wide range of battery operated professional tools lasting up to 10 minutes.
	SR4	Providing resistance for a long time against an experience attack using a wide range of advanced heavy duty tools, including battery operated power tools, using experienced methods of forced entry, lasting up to 10 minutes.
	SR3	Providing resistance for an extended length of time determined attack using heavy duty hand tools, and low voltage battery operated tools using a range of techniques that include making noise lasting up to 5 minutes.
	SR2	Providing resistance for a moderate length of time against attack using more advanced hand tools and cutting tools lasting up to 3 minutes
	SR1	Providing resistance for a short length of time against attack using basic, every-day readily available tools such as small hand tools lasting up to 1 minute.

# Centre for the Protection of National Infrastructure (CPNI)



Approved for UK Government Use, for details contact CPNI CPNI approved products are designed to provide a physical perimeter security barrier to either prevent an intrusion onto a restricted premises or detecting a trespasser should an intrusion occur.

CPNI fences have been approved by the Centre of Protection for National Infrastructure (CPNI) and have passed a rigorous testing schedule. Specifically designed to either prevent a direct assault onto a site or to reduces the potential damage and injuries that can occur if an incident does happen. For more information on contact CPNI and see the CPNI website.

## **Approvals**

# Secured By Design



Secured by Design status is restricted to companies or products that have been successfully tested to the high standards set by Secured by Design and meet Police Preferred Specification. Secured by Desing focuses on crime prevention of homes and commercial properties and promotes the use of security standards for a wide range of applications and products.

Our Secured By Design products have been designed with the principles that have been proven to achieve a reduction of crime risk by up to 75%, by combining minimal standards of physical security and well tested principles of natural surveillance and defensible space.

# Perimeter Security Suppliers Association





Formed with the encouragement of the government body the Centre for the Protection of National Infrastructure (CPNI) which shares the objective to promote the use of high performance products and their professional installation. Members of the association supply a wide range of high performance high security perimeter protection products, many of which have been independently tested, and which include perimeter fences and walls, vehicle barriers and blockers, bollards, turnstiles, gates, detection systems, street furniture, and other specialist equipment developed for this demanding sector of the security market.

## **NBS Plus**



NBS Plus is a library of manufacturers' technical product information, written in NBS format by our team of in-house experts and linked to specific clauses within the market-leading NBS specification software products. Using NBS Plus, designers can specify products quickly and accurately with just one click, importing the relevant product information directly into their specification.



## Duo8 SR1

# Dual Wire Security Rated Fencing







#### Features & Benefits

- LPCB LPS1175 Security Rated at SR1 by BRE & featured in the Red Book
- Secured By Design approved
- Strong and robust design with twin 8mm horizontal wires
- High level of vandal resistance
- Available either bolt down or in ground
- Various security topping options
- High visibility open mesh pattern
- Monitor site without restriction

Duo8 SR1 rated fencing with a double wire system is ideal for use in applications where Secured By Design accreditation is required. The Duo system is manufactured with dual 8mm horizontal wires sandwiching single 6mm vertical wires producing 50mm x 200mm mesh pattern that is not only strong and vandal resistant but also offers the best value.

Duo8 SR1 fencing system panels are available in 2.0, 2.4 and 3.0 metres in height and up to 3 mtr wide. Coupled with Zaun's tamper resistant stainless steel fasteners, the result is a rigid perimeter fence that offers a high degree of vandal resistance and an extremely high level of through visibility, ideal for CCTV cameras.

Offering the same product benefits as the standard Duo8, but with added security and tamper resistant clamp bars and fixings. Manufacturing is subject to stringent quality control, meaning all fences are of a uniformly high quality. The Duo8 SR1 rated fencing system has been Secured By Design approved by the Association of Chief Police Officers and Security Rating certification to LPS1175 and entry into the Red Book from the Buildings Research Establishment (BRE) achieving the security rating SR1.

Available with your choice of security toppings, RAL colours and gates to suit.









## **Specifications**

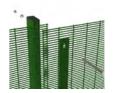
Height	Post Centres	Vertical Wire	Horizontal Wire	Mesh Pattern	Post Section
2.00 mtr	3.025 mtr (Max)	6mm	8mm	50mm x 200mm	60mm x 40mm
2.40 mtr	3.025 mtr (Max)	6mm	8mm	50mm x 200mm	80mm x 40mm
3.00 mtr	3.025 mtr (Max)	6mm	8mm	50mm x 200mm	80mm x 40mm



## **HiSec**

# The Original Security Fence









#### Features & Benefits

- Tested by the Ministry of Justice for use on HMP High Security Estate
- Secured By Design approved
- 358 tight mesh with no climbing aids & mitigates attack by tools
  Available in single panel heights of
- Available in single panel heights of up to 5.2 metres
- Available either bolt down, in ground or on wall post options
- 3 different vandal and tamper-proof fixing options available
- High visibility for use with CCTV

The HiSec security fencing system uses a popular '358' welded mesh configuration to repel would be intruders. The system attributes make it an excellent solution for high security applications. This fact is reflected by its use by the Home Office for prison facilities in the UK. The close mesh means that it is almost impossible to climb, and is very difficult to cut with anything other than power tools. Zaun has developed three fixing methods, ensuring appropriate and flexible solutions are available to meet specific installation specifications. Whether using our 'spider' clip for low risk sites, or our clamp bar system, HiSec can work to mitigate the risk of potential attack.

For high security sites, the panel ends are held against the post by a clamp bar which makes levering the panels off very difficult. Thanks to our leading system technologies and in-house manufacturing, the system is available up to 5.2 mtr high in a single panel. To ensure we are able to supply a complete, single solution, pedestrian and vehicle access solutions have been carefully designed to address both aesthetic requirements along with ensuring the same security level of the mesh is maintained.

The system is also ideal for integrating with CCTV, PIDs and security topping enhancements such as barbed wire and razor coils, all of which can be supplied as part of a complete turnkey solution.







## **Specifications**

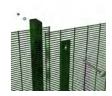
HeightPost CentresVertical WireHorizontal WireMesh PatternPost Section1.27 mtr - 5.20 mtr2.470 / 2.525 mtr4mm4mm76.2mm x 12.7mmVarious

Note: Post sections vary depending on the panel fixing selected. Please check our website for more information.



## HiSec SR1

# Security Rated Fencing





#### Features & Benefits

- LPCB LPS1175 Security Rated at SR1 by BRE & featured in the Red Book
- Secured By Design approved
- Manufactured with traditional 358 mesh pattern
- Tight open mesh pattern provides excellent visibility & site protection
- Each panel is overlapped and fixed to posts using spider clip fixings
- Available either bolt down, in ground or on wall

HiSec SR1 fence from Zaun uses the popular 358 welded mesh configuration, which is ideal for use in applications where Secured by Design accreditation is required. The SR1 fence system attributes make it an excellent solution for high security applications including schools, prisons, utility suppliers or anywhere that a physical security protection is required.

The fence panels use the prison mesh configuration making the fence system almost impossible to climb and very difficult to cut with anything other than power tools. Available in 2.0, 2.4 and 3.0 metres in height. Coupled with Zaun's tamper resistant fasteners, the result is a rigid perimeter fence that offers a high degree of vandal resistance and an extremely high level of through visibility.

The HiSec SR1 fence system offers the same product benefits as the standard HiSec, but with added security. Manufacturing is subject to stringent quality control, meaning all fences are of a uniformly high quality. This system conforms to BS 1722: Part 14: Category 4 and carries certification to LPS 1175 SR1 as required for Secured by Design and featured in the BRE Red Book.









## **Specifications**

HeightPost CentresVertical WireHorizontal WireMesh PatternPost Section2.00 mtr - 3.00 mtr2.470 / 2.535 mtr4mm4mm76.2mm x 12.7mmVarious

Note: Post sections vary depending on the panel fixing selected. Please check our website for more information.



## HiSec Prison

# Prison Mesh Fencing





## Features & Benefits

- Tested by the Ministry of Justice for use on HMP High Security Estate
- Secured By Design approved
- 358 tight mesh with no climbing aids
   mitigates attack by tools
- & mitigates attack by tools
   Available either bolt down, in ground or on wall post options
- Supplied on prison specified round posts
- Available with additional privacy screen
- Approved supplier to UK Ministry of Justice

The HiSec Prison high security fencing system uses a popular '358' welded mesh configuration to repel would be intruders. The system attributes make it an excellent solution for high security applications. This fact is reflected by its use by the Home Office for prison facilities in the UK.

The close mesh means that it is almost impossible to climb, and is very difficult to cut with anything other than power tools. The HiSec Prison welded mesh panel are manufactured in 5.2m x 2.5m single welded panel. Manufactured using 4mm horizontal and vertical wires, welded with 76.2mm x 12.7mm open mesh aperture.

Each panel is manufactured from pre galvanised steel wire to BS EN 10244-2 Class A Zn95AL5, fixed to round prison specified posts using full length clamp bars and fixing bolts. The panels are fixed to the inside or secure side, of the posts. Steel Cladding & Double Skin enhancements are also available for additional protection.

The system is also ideal for integrating with CCTV, PIDs and security topping enhancements such as FST toppings, barb and razor coils, all of which can be supplied as part of a complete turnkey solution.





## **Specifications**

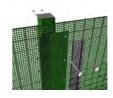
HeightPost CentresVertical WireHorizontal WireMesh PatternPost Section5.20 mtr +2.440 mtr4mm4mm76.2mm x 12.7mmPrison



## HiSec Dual Skin

# Double the protection of standard 358







#### Features & Benefits

- Ideal for high security applications
- 2 x layers of HiSec providing double the protection
- Exceeds UK prison specifications
- Available with in ground, bolt down, fixed to walls options
- Available with straight or cranked posts for additional protection
- Optional fence toppings are also available
- Good visibility for use with CCTV cameras

Zaun's double skin 358 mesh, HiSec DualSkin has been designed and developed for applications and sites that require a more robust solution than standard 358 mesh. The HiSec DualSkin features two layers of the traditional HiSec 358 welded mesh with 76.2mm x 12.7mm open mesh sections.

These panels can be welded or bolted together with the secondary panel turned 90 degrees to make a very tight mesh configuration, which is difficult to cut and almost impossible to climb. The small apertures of the double skin 358 mesh with welds at each intersection eliminates foot and finger holds for people to climb or gain access to the site.

The small apertures of the mesh section is also small enough to ensure effectiveness against objects being passed through and is highly resistant against the use of hand or power cutting tools. The double skin 358 mesh conforms to BS1722 Part 14 Category 4 and has been extensively used in prisons and by the Ministry of Defence (MoD) to protect high security assets.

HiSec DualSkin provides an ideal solution for a wide variety of high security perimeter, integrated solutions and access control applications. Additional fence toppings can also be used to add extra security to the fence line.







## **Specifications**

HeightPost CentresVertical WireHorizontal WireMesh PatternPost Section1.80 to 5.2 mtr2.525 mtr4mm4mm12.7mm x 12.7mm80mm x 80mm

Note: HiSec DualSkin can be applied to any height up to 6 metres.

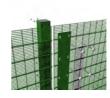
\* Double Skin 358 can be made as a full or partial panel.



## HiSec TubeDetect

# An discrete integrated PIDs solution







#### Features & Benefits

- Ideal for use with perimeter intrusion detection systems (PIDs)
- No external wires exposed to cutting
- Discrete cabling prevents tampering
- Tight mesh offers no climbing aids Single panel heights can be supplied of up to 3 metres
- Available either bolt down, in ground
- High visibility for use with RADAR and CCTV camera systems

Zaun, using our industry leading research and development department have produced a revolutionary pids fence. The HiSec TubeDetect PIDs fence is designed to incorporate perimeter intrusion detection systems directly into the fence line, without any cables or wires being on display. This PIDs fence enables you to protected your key asset perimeter with additional security, whilst hiding the exposed wires from any external threats.

Using flexibility in our mesh manufacturing process, Zaun have been able to produce a traditional HiSec 358 mesh panel with a hollow tube in place of either one or a number of the horizontal wires. This development will allow for discrete placement of microphonic cable systems and also offers protection against tampering. Along with this product, Zaun can offer a range of microphonic / fibre based protection systems.

The discrete nature of the product means that would be intruders are unaware of the existence of the PIDs fence system and so are easier to track and target. The system is also available in more conventional, medium security fences. Electronic controllers and or interfaces can also be housed in post centres to completely obscure the system.

Available with your choice of fence toppings the HiSec Tube Detect PIDs fence system provides a full integrated solution to protect your perimeter.



## **Specifications**

Height	Post Centres	Vertical Wire	Horizontal Wire	Mesh Pattern	Post Section
1.80 mtr<	2.440 mtr	4mm	4mm	12.7mm x 76.2mm	60mm x 60mm
1.80 mtr to 3.00 mtr	2.440 mtr	4mm	4mm	12.7mm x 76.2mm	80mm x 80mm



## HiSec Super6

# Leading high security system







#### Features & Benefits

- Secured By Design and CPNI approved
- Replaces double skin 358 mesh in both performance & cost
- Available in single panel up to 5.2 mtr
   Available either bolt down, in ground or on wall post options
- High visibility ideal for use with CCTV
- A wide variety of fence toppings can also be supplied

HiSec Super 6 358 mesh has been developed as our premier high security system. The HiSec Super 6 358 mesh is aimed at high profile and sensitive sites that require greater perimeter protection. HiSec Super 6 358 is based on the standard HiSec 358 mesh system but is even stronger, presenting a formidable barrier to anyone trying to gain unauthorised access to key assets and sites.

The 4mm horizontal wires remain the same as the standard HiSec 358 mesh, however HiSec Super 6 358 features 6mm gauge vertical wires. The mesh pattern remains at 76.2mm x 12.7mm, ideal for use with CCTV cameras with excellent visibility on anyone trying to breach the perimeter.

Available with either single fix or dual fix full length clamp bar options for fixing to the posts. The full length clamp bar provides additional security for any intruders trying to break into the fence line and can be provided with non-removable external fixings to ensure no weaknesses are in the fence line.

Slotted fixing holes ensure the installation is easy and leaves a neat, flush fitting. HiSec Super 6 358 can also be used with a range of fence toppings and integrated solutions to provide a full turnkey high security solution. Pedestrian and vehicle gates are also available to match the fence line.









## **Specifications**

Height Post Centres Vertical Wire Horizontal Wire Mesh Pattern Post Section

1.27 mtr - 5.20 mtr 2.470 / 2.525 mtr 6mm 4mm 76.2mm x 12.7mm Various

Note: Post sections vary depending on the panel fixing selected. Please check our website for more information.



## HiSec Super8

# Same footprint, higher security







#### Features & Benefits

- Tight mesh configuration offers no climbing aids
- Mitigates attack by hand and powered tools through tight mesh design
- Single panel heights can be supplied of up to 5.2 mtr
- Available either bolt down, in ground or on wall post options
- · Ideal for use with CCTV cameras

HiSec Super 8 358 mesh has been developed as a more secure version of HiSec Super 6. Aimed at high profile and sensitive sites that require greater perimeter protection, HiSec Super 8 358 is based on the standard HiSec 358 mesh system but is even stronger, presenting a formidable barrier to anyone trying to gain unauthorised access to key assets and sites.

The 4mm horizontal wires remain the same as the standard HiSec 358 mesh, however HiSec Super 8 358 features 8mm gauge vertical wires. The mesh pattern remains at 76.2mm x 12.7mm, ideal for use with CCTV cameras with excellent visibility on anyone trying to breach the perimeter.

Available with either single fix or dual fix full length clamp bar options for fixing to the posts. The full length clamp bar provides additional security for any intruders trying to break into the fence line and can be provided with non-removable external fixings to ensure no weaknesses are in the fence line.

Slotted fixing holes ensure the installation is easy and leaves a neat, flush fitting. HiSec Super 8 358 can also be used with a range of fence toppings and integrated solutions to provide a full turnkey high security solution. Pedestrian and vehicle gates are also available to match the fence line.





## **Specifications**

Height	Post Centres	Vertical Wire	Horizontal Wire	Mesh Pattern	Post Section
1.27 to 4.00 mtr	2.525 mtr	8mm	4mm	12.7mm x 76.2mm	80mm x 85mm
4.00 to 5.20 mtr	2.525 mtr	8mm	4mm	12.7mm x 76.2mm	100mm x 100mm



## HiSec Super10

# Higher resilience to attacks







#### Features & Benefits

- Secured By Design approved
- 358 tight mesh configuration offers

## climbing aids

- Available in single panel up to 5.2 mtr
- Available either bolt down, in ground or on wall post options
- · High visibility ideal for use with CCTV
- For areas where visibility needs to be restricted, upgrades can be added
- Extremely strong and robust

The HiSec Super 10 358 mesh system has been developed using our flexible in-house manufacturing capabilities. Zaun's HiSec Super range now includes the only Super 10 358 mesh system around.

This uniquely strong Super 10 358 mesh is based on HiSec, but is even stronger, presenting a formidable barrier to anyone trying to gain unauthorised access. The 4mm horizontal wires remain the same however the vertical wires in HiSec Super 10 are welded with a 10mm gauge.

HiSec Super 10 mitigates helps to create a value added solution, as it mitigates the requirement to use double skin 358 systems, thus reducing costs for production and installation, whilst offering a high level of resistance to attack.

HiSec Super 10 358 uses the RHS post configuration for added strength and security. The preformed sigma shaped post uses integrated side plates, ensuring that adjacent panels do not overlap. A 140mm plate clamp bar and non-removable external fixings leave no weakness in the fence line.

Available with either single fix or dual fix full length clamp bar options for fixing to the posts. The full length clamp bar provides additional security for any intruders trying to break into the fence line and can be provided with non-removable external fixings to ensure no weaknesses are in the fence line.

Slotted fixing holes ensure the installation is easy and leaves a neat, flush fitting.







## **Specifications**

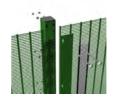
Height	Post Centres	Vertical Wire	Horizontal Wire	Mesh Pattern	Post Section
1.27 to 4.00 mtr	2.525 mtr	10mm	4mm	12.7mm x 76.2mm	80mm x 85mm
4.00 to 5.20 mtr	2.525 mtr	10mm	4mm	12.7mm x 76.2mm	100mm x 100mm



## HiSec Super SR2

# Tested and approved security rating







## Features & Benefits

- LPCB LPS1175 Security Rated at SR1 & featured in the Red Book
- · Secured By Design approved
  - Close mesh offers no climbing aids
- Supplied with RHS posts, giving security advantages to the system
- Available either bolt down, in ground or with on wall post options
- High visibility, ideal for CCTV camera and security
- Strong vertical wires, reduces attack effectiveness

HiSec Super SR2 Rated Fencing has been developed by Zaun in consultation with the Home Office as our premier high security system. Aimed at high profile and sensitive sites requiring the greatest perimeter protection.

The HiSec Super SR2 Rated Fencing solution is based on the original 358 HiSec system, but is even stronger. Presenting a formidable barrier to anyone trying to gain unauthorised access. HiSec Super SR2 comes with 4mm horizontal wires and 10mm gauge vertical wires with 76.2mm spacing.

The SR2 rated fencing system has achieved Secured by Design accreditation from the Association of Chief Police Officers and Security Rating certification to LPS1175 and entry into the Red Book from the Buildings Research Establishment (BRE) achieving the security rating SR2.

HiSec Super SR2 uses the RHS post configuration for added strength and security. The preformed post uses integrated side plates, ensuring that adjacent panels do not overlap. A clamp bar and non-removable external fixings leave no weakness in the fence line. Slotted fixing holes mean installation is easy and leaves a neat, flush fitting.









### **Specifications**

HeightPost CentresVertical WireHorizontal WireMesh PatternPost Section2.00 mtr to 4.00 mtr2.525 mtr10mm4mm12.7mm x 76.2mm80mm x 80mm



## **ArmaWeave**

# The Benchmark in Security Fencing





#### Features & Benefits

- Tight woven mesh configuration offers no climbing aids
- Significant enhancement offered from
   attack by band and newgrad tools
- attack by hand and powered tools
- Manufactured using high tensile steelUnique ability to rake up inclines
- Mesh options available to meet
- Ideal for us with PID and CCTV
- Ability to be raked up and incline
- European Patent No. 2509692

The ArmaWeave system is designed to secure sites of critical importance. Installed on multiple high profile locations. ArmaWeave has unique system properties, which provides significant advantages over other perimeter fencing solutions.

The woven mesh system offers a more substantial delay from attack, from hand and powered non-contact tools than would be offered from traditional welded mesh systems, thanks to its tighter mesh pattern and use of high tensile steel wires.

ArmaWeave also offers seamless integration with detection systems including PIDs, CCTV and topping enhancements. Tested by various government departments, ArmaWeave meets the current criteria for forcible attack (details upon request). The tight woven mesh pattern offers no climbing aids and provides little room for blades and cutting tools to attack the fabric.

Zaun has also developed pedestrian and vehicle access solutions to meet the same high security rating of the perimeter fencing solution.











## **Specifications**

For specification details please contact a member of our technical team on +44 (0)1902 796699 or info@zaun.co.uk



## **ArmaWeave Plus**

# The highest attack resilience on the market



### Features & Benefits

- Approved for UK Government use (for details contact CPNI)
- Secured By Design Approved
- Even more secure than standard ArmaWeave
- Tight mesh offers no climbing aids
- Significant enhancement offered from attack by hand and powered tools
- · High tensile steel
- Double high security fixing at post
- Mesh options available to meet high security criteria
- European Patent No. 2509692

When the highest level of perimeter protection is necessary, Zaun has a product to meet this requirement. The system has been carefully designed to eradicate risk from attack, whilst ensuring properties of the mesh fencing system are maintained. ArmaWeave Plus is our highest rated system, giving maximum delay from forcible attack. The system is also suitable for integration with PIDs, CCTV and topping enhancements.

In line with approved testing methods, Zaun carried out a program of forcible attack trials using a variety of attack tools. We used approved method of entry professionals to ensure that our tests exactly replicate official methods. The results of our testing have demonstrated the significant advantages ArmaWeave gives you.















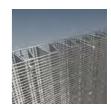
## **Specifications**

For specification details please contact a member of our technical team on +44 (0)1902 796699 or security@zaun.co.uk



## CorruSec SR3

# A unique corrugated high security solution





#### Features & Benefits

- Independently tested with a minimum delay time of at least 5 minutes
- Unique configuration of welded mesh panels
- Designed to defeat a range of hand and power tools
- Ideal for use on sites of Critical National Importance
- Available in ground or base plated
- Can be used with your choice of security toppings
- Patent Pending

CorruSec SR3 is a patent pending innovative high security perimeter fencing solution that has been designed and developed by Zaun. The unique construction has been specifically designed to provide a minimum delay time of at least 5 minutes. The specially configured mesh system has been independently tested to defeat a range of attack methods including both hand tools and power tools. Ideal for protecting assets on sites including water utility sites, oil and gas compounds, data centres and other sites of critical, national importance. The robust fencing solution also provides good visibility for use with CCTV camera systems.

CorruSec is configured using anti climb HiSec 3/5/10, with flat front and rear panels and a corrugated mesh panel in the centre. Each individual panel features a 76.2mm x 12.7mm mesh configuration with 3mm horizontal and vertical wires. The corrugated section is pressed to approximately 100mm in depth. All three layers are bolted together using bolts fixed into place in a grid pattern throughout the combined fence panel.

At a minimum height of 2.4 metres high, CorruSec features a maximum corrugated infill of 2.4 metres high. Each panel is supplied with widths of 2.5 metres with 2540mm post centres with a double row of fixings. Posts are designed using 80x80mm SHS and available in either bolt down or in ground post options. Full panel assembly is fixed to the posts using 80mm full height clamp bars with fixing centres of 9 inches (228.6mm).

Available galvanised only or galvanised and powder coated in almost any RAL colour. A wide range of fence toppings can also be supplied.



### **Specifications**

Height	Post Centres	Vertical Wire	Horizontal Wire	Mesh Pattern	Post Section
2.40 mtr +	2.540 mtr	3mm	3mm	12.7mm x 76.2mm	80mm x 80mm



## CorruSec Premier SR4

# The ONLY mesh fencing with a 10 min delay





## Features & Benefits

- LPCB LPS1175 Security Rating 4
- Independently tested with a minimum delay time of at least 10 minutes
- Unique configuration of welded mesh panels
- Designed to defeat a range of hand and power tools
- Ideal for use on sites of Critical National Importance
- · Available in ground or base plated
- Can be used with your choice of
  security toppings.
- security toppings
  Patent Pending

CorruSec Premier SR4 is a patent pending innovative high security perimeter fencing solution that has been designed and developed by Zaun. Independently tested by BRE and entered into the RED BOOK, CorruSec Premier SR4 has successfully passed and achieved LPS1175 SR4 rating.

The unique construction has been specifically designed to provide a minimum delay time of at least 10 minutes. The specially configured mesh system has been independently tested to defeat a range of attack methods including both hand tools and power tools. Ideal for protecting assets on sites including water utility sites, oil and gas compounds, data centres and other sites of critical, national importance. The robust fencing solution also provides good visibility for use with CCTV camera systems.

CorruSec Premier is configured using anti climb HiSec Super 10, flat front and rear panels and a corrugated HiSec 3/5/10 mesh panel in the centre. Each flat panel features a 76.2mm x 12.7mm mesh configuration with 4mm horizontal and 10mm vertical wires. A buried version of CorruSec Premier is available replacing the back flat panel with HiSec 3/5/10, making the system more cost effective. The corrugated section is pressed to approximately 100mm in depth. All three layers are bolted together using bolts fixed into place in a grid pattern throughout the combined fence panel.

At a minimum height of 2.8 metres high, CorruSec Premier features a maximum corrugated infill of 2.4 metres high. Each panel is supplied with widths of 2.5 metres with 2540mm post centres with a double row of fixings. Posts are designed using 80x80mm SHS and available in either bolt down or in ground post options. Full panel assembly is fixed to the posts using 80mm full height clamp bars with fixing centres of 9 inches (228.6mm).

Available galvanised only or galvanised and powder coated in almost any RAL colour. A wide range of fence toppings can also be supplied.







### **Specifications**

Height Post Centres Vertical Wire Horizontal Wire Mesh Pattern Post Section

2.80 mtr + 2.540 mtr 10mm 4mm 12.7mm x 76.2mm 80mm x 80mm



## What is PAS 68?



BSi PAS 68 is the a Publicly Available Specification for vehicle security barriers and fences. It has become the standard and security benchmark for Hostile Vehicle Mitigation (HVM) equipment and is the specification against which the perimeter security equipment is tested to prevent vehicle borne attacks.

## The PAS 68 Specification

The PAS 68 specification defines the vehicle type, test mass and impact speed together with the required measurements, vehicle and test item details that should be recorded and reported. After the impact and if the test is successful, the tested product stopped and immobilised the vehicle, then the penetration distance is measured. These measurements can be used to decide which product is most suitable for each site.

## **Classification Code**

Projects that are specifying HVM equipment, not only the counter terrorist benefits, but also the heavy duty properties of the equipment. However there are many different test specifications including PAS 68. There are also a range of criteria within each specification, depending on the kinetic energy values. It is very important to know which level of HVM is required as there could be a cost difference of thousands between each category.

Vehicle	Test Weight (kg)	Vehicle Class	Vehicle Speed (kph)	Angle	Penetration of Vehicle	Dispersion of Debris
V	2500	(N1G)	48	90:0	0.0	0

## **Vehicle Energy**

The test criteria is selected from one of the following combinations of vehicle types

Weight x 1000 kg	80 kph	64 kph	48kph
7.5t	1852kj	1185kj	667kj
3.5t	864kj	553kj	311kj
2.5t	617kj	395kj	222kj
1.5t	370kj	237kj	133kj

## PAS 68 Testing



There are various international testing standards for VSBs (Vehicle Security Barriers). Those most widely referred to are the UK's British Standards Institution (BSi) Publicly Available Specification (PAS) 68, the US standard ASTM F2656 (formerly the K rating) and the new International Workshop Agreement IWA 14-1.

Separate advice on site assessment and installation considerations are contained in the UK's BSi PAS 69 and IWA 14-2

The European CEN workshop agreement CWA 16221 combines the detail from BSi PAS 68 and PAS 69. It provides guidance on test methods for determining vehicle security barrier performance classification and also includes a series of informative annexes that advise on appropriate product selection, installation and use.

The BSi PAS 68 specification defines two assessment methods of determining the performance classification of vehicle security barriers:

- · The vehicle impact method
- · The design method including finite element analysis (FEA) procedures

The Vehicle Impact Test Method: the vehicle type, test mass and impact speed together with the required measurements, vehicle and test item details that should be recorded and reported. Post impact, and if the test is successful with the VSB stopping and immobilising the test vehicle, then the penetration distance is measured. This reading is taken from the front of the vehicle cargo load bed to the position of the original rear face of the VSB. The dispersion distance of major debris is also measured as this may be a consideration at certain sites.

These measurements create the Classification Code which can be used to determine the most suitable VSB for each individual site. It must be remembered that the impact testing uses repeatable test criteria and may not replicate the precise dynamics of real life attacks or vehicle configurations. However, it does provide a common baseline to classify and compare VSB systems.

Equipment that has been tested in accordance to the BSi PAS 68 specification requires an appropriate installation which is tailored to the individual sites ground and environmental conditions. This ensures the adequate performance if challenged in a hostile vehicle attack.

The BSi PAS 68 is a specification and not a standard as it is an on going Research and Development program. This means not all testing is successful, however manufacturers may still state that the equipment has been impact tested to BSi PAS 68, even if the product has not successfully surpassed the specification.

Ensure that the manufacturer states "successfully impact tested" on their literature, or request the impact test's Classification Code. The penetration distance of the vehicle should be paramount.



# HiSec Super PAS 68

# The first integrated HVM fence solution



#### Features & Benefits

- Hostile Vehicle Mitigation (HVM) fencing solution passed to PAS 68:2010 standards
- An incorporated PAS 68 system with either HiSec Super 6, HiSec Super 8 or HiSec Super 10 mesh
- Nullifies attacks by vehicles in one easy to install fencing solution
- Features car park spring barriers tested to BS6399 and BS1680
- The worlds first PAS68 Barrier
   System with integral security fence

Zaun are the first company to design and manufacture a fully integrated hostile vehicle mitigation fencing system to BSI PAS 68:2010 standards. The HiSec Super PAS 68 fence system has been fully crash tested to PAS 68 standards and rated to PAS 68:2010 V/2500 (N1G)/48/90:0/0.0.

This PAS 68 fence system has been designed specifically to mitigate the ever increasing security risk on sites of critical national importance. This zero penetrating PAS 68 fence solution uses the leading industry technologies to nullify attacks by vehicles. The HiSec Super PAS 68 fence system will stop a 2.5 tonne vehicle traveling at 30 mph (48km/h), designed as a stand alone fencing solution. Designed to be installed using only one concrete footing for ease of installation, providing a single line of defence system.

Manufactured using Zaun's HiSec Super 6 mesh, the PAS 68 fence system is based on HiSec 358 but is even stronger, presenting a formidable barrier to anyone wishing to gain unauthorised access. The 4mm horizontal wires remain the same however the vertical wires comes with a 6mm gauge with 76.2mm spacing. This system can also be supplied with HiSec Super 8 or HiSec Super 10 mesh fencing systems.







## **Specifications**

HeightPost CentresVert x Horiz WireBarrier SystemMesh PatternPost Section2.70 mtr to 3.60 mtr2.470 mtr6mm x 4mmGME Spring12.7mm x 76.2mmOMEGA



## MultiFence PAS 68

# A mobile high security HVM system



### Features & Benefits

- Crash tested to PAS 68 specifications
- Allows for changes in direction and various ground conditions
- Fence heights of up to 5 mtr
- Fully integrated with PIDs, CCTV and topping enhancements
- No in ground pinning or foundations
- Suitable for permanent or temporary installations
- Protection for the travelling public from roadside and site hazards
- Prevention for unauthorised vehicle

Zaun's MultiFence PAS 68 HVM fence and barrier system is one of the first fully integrated hostile vehicle mitigation fence solutions on the market. MultiFence PAS 68 is a patented design that achieves PAS 68 2010: V/7500[N2]/48/90:3.0/0.0 and V/7500[N2]/64/90:5.0/0.0. MultiFence PAS 68 is designed to mitigate the ever-increasing security risk on sites of critical importance. This zero penetration solution uses leading industry technologies to nullify attack by vehicles.

MultiFence PAS 68 combines all the attributes of our standard system, tested to meet the stringent quality standards of BS EN 1317 Part 2 (vehicle restraint systems). The TVCB blocks are approved for use by the Highways Agency. The system is ideal for applications such as utility plants, as no below ground foundations are required and it can be used on soft and hard standing.

MultiFence PAS 68 is available with TVCB blocks that are designed to deflect an errant vehicle away from local hazards within or immediately adjacent to the highway, which have the potential to cause danger to the occupants of an errant vehicle, the workforce, or others.







## **Specifications**

Overall Height	Post Centres	Vertical Wire	<b>Horizontal Wire</b>	Mesh Pattern	<b>Post Section</b>
1.8 - 3.6 mtr	1.50 mtr	4mm	4mm	HiSec	60mm x 60mm
	1.50 mtr	6mm	4mm	HiSec Super6	60mm x 60mm
	1.50 mtr	4mm	4mm	ArmaWeave	60mm x 60mm
Note: Block configuration	on may differ at greater h	eights			
Block Specification	on Height	Width	Length	Weight	<b>HVM Addition</b>
TVCB	800mm	450mm	3 mtr	2,500 Kg	HVM Cable
					System



## RDS PAS 68

# A rapidly deployable HVM system



#### Features & Benefits

- Crash tested to PAS 68 specifications
- Rapidly deployable
- Up to heights of 3 mtr
- Allows for changes in direction and ground conditions Suitable for hard or soft ground
- Available with security enhancements
- No ground pinning or foundations
  - Available for rental or purchase

Zaun's innovative PAS68 fence system RDS PAS 68 uses an RDS block combined with a post arrangement which allows the fence panels to be erected and removed in a matter of minutes. The RDS PAS68 fence system has been crash tested and rated to BSI PAS68:2010 standards. This temporary fencing system has been crash tested to stop 7.5 tonne vehicles meeting ratings of V7500(N2)/48/90:11.6/0.0.

The RDS PAS68 fence system offers a combination of high security temporary fencing with a hostile vehicle mitigation PAS 68 enhancement, all within the same fence line. This gives the system the product attributes normally only seen on permanent installations. The ease in which this system is deployed ensures that on-site disruption normally associated with the install and removal of a fence line is at a minimum.

Available in heights of 3 mtr, the modular system has been designed to incorporate vehicle and pedestrian access. Pedestrian access portals can be supplied with PAS 68 rating and CCTV and PID systems can also be incorporated, using carefully selected system technologies. This entire system requires no foundations or ground pinning.







## **Specifications**

Height	Post Centres	Vertical Wire	<b>Horizontal Wire</b>	Mesh Pattern	Post Section
1.8 - 3.0 mtr	2.75 mtr	4mm	4mm	12.7mm x 76.2mm	70mm x 70mm
Block Specificatio	n				
	Height	Width	Length	Weight	HVM Addition
RDS Block	800mm	450mm	900mm	750 Kg	HVM Cable System



## Terror Stopper MRA PAS 68 Manual Barriers

# A manual HVM barrier system



#### Features & Benefits

- · Manual rising/drop arm barrier
- Impact tested to BSi PAS 68
- Impact posts stanchions
- Rising Beam is fully welded using a steel frame
- Non powered rising/drop arm barrier
- Boom lengths available 3 metre & 4 metres
- Design of her Majesty's Government manufactured by Zaun Limited
   British Government design & PAS 68
- British Government design & PAS 68 impact tested

Zaun's range of Terror Stopper PAS 68 Manual Barriers are specifically designed to be incorporated into our range of perimeter protection systems. Our selection of PAS 68 manual barriers offers a range of barriers designed to combat differing speeds and vehicle types to suit most site requirements.

Manufactured in 3 different versions to deal with various threats and requirements the Terror Stopper range of rising arm barriers are designed specifically to stop vehicles gaining access to sites of critical national importance. All versions have been independently PAS 68 tested and approved.

- Terror Stopper 1 PAS 68 Manual Barrier MK2 is a manually operated rising arm barrier with a 4 metre opening capable of stopping a 3.5t vehicle at 50mph. PAS 68 rated at V3500 (N1)/80/90:2.2/0.0
- Terror Stopper 2 PAS 68 Manual Barrier MK3 is a manually operated rising arm barrier with a 3 metre opening capable of stopping a 7.5t vehicle at 30mph. PAS 68 rated at V7500 (N2)/48/90:0.0/0.0
- Terror Stopper 3 PAS 68 Manual Barrier MK3 is a manually operated rising arm barrier with a 4.5 metre opening capable of stopping a 7.5t vehicle at 30mph. PAS 68 rated at V7500 (N2)/48/90:0.0/0.0







## **Specifications**

Maximum crash beam length: 4500mm

Barrier Type: Counter Balanced Barrier

Electrical Requirements: No power Required



## Terror Stopper PAS 68 Static Bollards

# A HVM static bollard design



#### Features & Benefits

- Physically impact tested to BSi PAS 68 specifications
- Hostile vehicle mitigation bollards
- Meet the specific security requirements of a site, addressing both speed and vehicle types
- Unobtrusive, aesthetically pleasing appearance
- Physically impact tested to PAS68 criteria
- Ease of installation
- Strength and Durability

Zaun's Terror Stopper PAS 68 static bollards are a range of hostile vehicle mitigation (HVM) bollards rated at BSI PAS 68:2010, capable of stopping terrorist vehicle attacks. These PAS 68 static bollards are designed specifically to be incorporated into our range of perimeter protection systems. Our selection offers a range of PAS 68 static bollards capable of stopping vehicles at differing speed and vehicle types to suit most site requirements. Manufactured in four different versions to deal with the various threats and requirements for site of critical national importance. Each of the Terror Stopper bollards have all been independently PAS 68 tested and approved.

- Terror Stopper 1 PAS 68 Static Bollard is a 219mm diameter bollard capable of stopping a 7.5 tonne vehicle at 30mph. PAS 68:2010 rating of V7500 (N2)/48/90:0.0/0.0.
- Terror Stopper 2 PAS 68 Static Bollard is a 219mm diameter bollard capable of stopping a 7.5 tonne vehicle at 40 mph. PAS 68:2010 rating of V7500 (N2)/64/90:4.0/16.7.
- Terror Stopper 3 PAS 68 Static Bollard is a 273mm diameter bollard capable of stopping a 7.5 tonne vehicle at 40mph. PAS 68:2010 rating of V7500 (N2)/64/90:3.3/0.0.
- Terror Stopper 4 PAS 68 Static Bollard is a 273mm diameter bollard capable of stopping a 7.5 tonne vehicle at 50mph. PAS 68:2010 rating of V7500 (N3)/80/90:10.6/11.1







## **Specifications**

	Terror Stopper 1	Terror Stopper 2	Terror Stopper 3	Terror Stopper 4
Foundation Type	Type C	Type C	'Biscuit' Type B	Type C
Embedded	500mm	500mm	230mm	500mm
Height above ground	1000mm	1000mm	1000mm	1080mm
Diameter	219mm	219mm	273mm	273mm
Finish	Powder Coated	Powder Coated	Powder Coated	Powder Coated

All Options available with a range of Aesthetic Sleeves, including stainless steel



## Terror Stopper PAS 68 Pedestrian Portals

# HVM pedestrian access gateways



#### Features & Benefits

- PAS 68:2010 impact tested to stop a 7.5 tonne vehicle travelling at 40 mph
- Fully customisable with your choice of pedestrian access - from turnstiles to gates
- Available with a range of access control and locking options
- Ideal for use with out MultiFence PAS 68 system but can be used standalone
- Your choice of mesh options

The Terror Stopper PAS 68 Pedestrian Portal is a crash rated re-deployable pedestrian portal frame that has been tested and approved to BSI PAS 68:2010 standards. This PAS 68 Pedestrian Portal system has bee tested and approved to stop a 7.5 tonne vehicle travelling at 40 mph and stops the vehicle within the aperture.

Designed to house a range of pedestrian access options this PAS 68 Pedestrian Portal is ideal for everything from single pedestrian gates to turnstiles and gate combinations. Supplied as a stand alone PAS 68 Pedestrian Portal or with various infills – this crash rated pedestrian portal is perfect for deployment at temporary major events.

This PAS 68 Pedestrian Portal system has been designed to be used within the MultiFence barrier system or as a standalone pedestrian portal. Available as a single or double portal, the crash rated pedestrian portal system can restrict access to and from a site by using turnstiles as a point on entry and a gate as a point of quick exit.

All gates are available with your choice of mesh and lock options. These pedestrian portals have been tested and achieved BSI PAS 68 rating of PAS 68:2010 V/7500 (N2)/48/90:1.0/0.0.







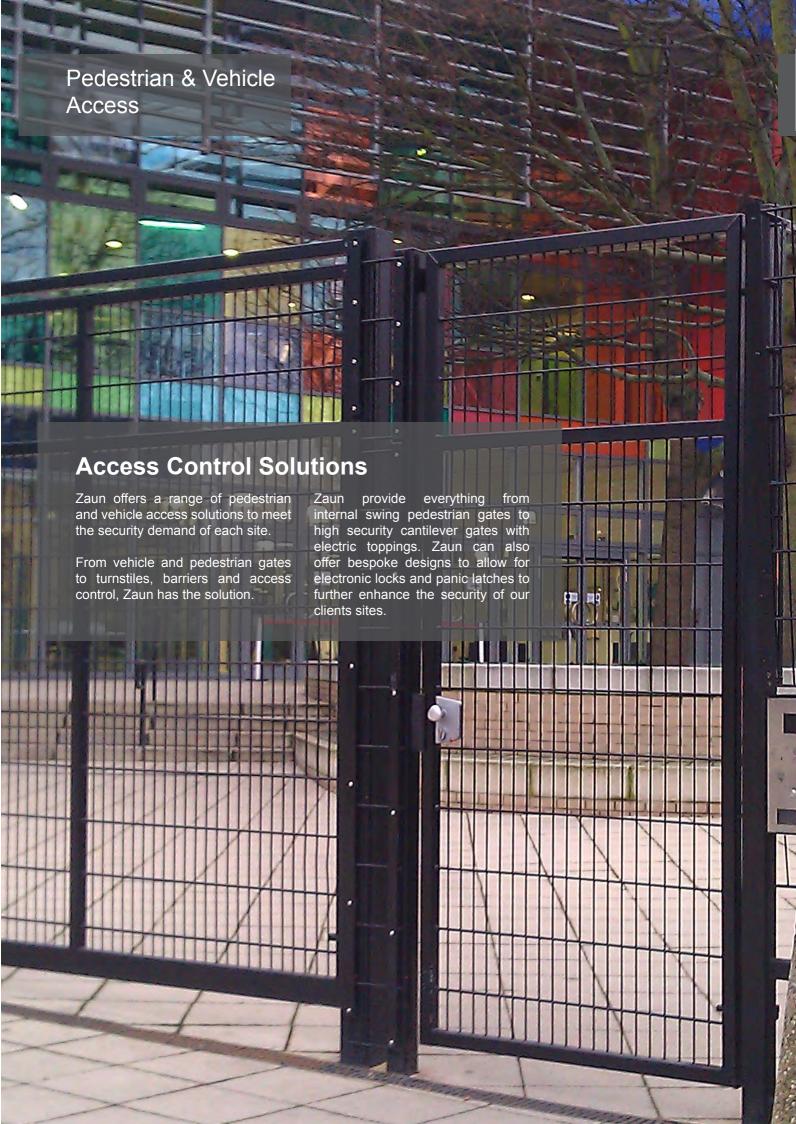
## **Specifications**

Access Aperture: 1200mm

**Dimensions:** 3040mm x 4320mm

Foundations: No Foundations Required

Size: Available as Single or Double Portal





## **Pedestrian Turnstiles**

# Designed to control pedestrian access



#### Features & Benefits

- Designed to complement the fence line
- Ideal for controlling pedestrian access to or from your site
- Available with optional signage
- · Optional cowled exit switch
- 90 degree and 120 degree rotor options
- Single or dual rotor
- Bespoke solutions also available
- Available in your choice of RAL colour

A range of pedestrian turnstiles, available in full height, 3/4 height or half height options. Our high specification pedestrian turnstiles are suitable for controlling access in a wide variety of environments. Designed for perimeter use and often used in conjunction with sliding or hinged gates. Providing both pedestrian and vehicle control. On receipt of a signal from a push-button, card reader etc., the turnstile will release the rotor, then closes and re-bolts. Available in single or double cage versions, depending on the site requirements. Turnstile heights can also vary for full height turnstiles, tailored for site requirements. A single rotor for left or right handed installations or twin rotors where two turnstiles are required.

Designed with 4 wing 90 degree or 3 wing 120 degree rotor options for a faster throughput. Also available with additional signage, LED down lights, canopy, directional indicators, access control plates and cowled exit switches. Manufactured with a cage combination of vertical bars with columns to form a short walkway. Columns also used to mount card readers and other access control solutions. A metal canopy, designed with anti-drip guttering, lifts off for access.

Also available in any colour in the RAL colour range.



## **Specifications**

**Duty Rating:** 100% - designed for continuous and frequent use

Options: Signs / Special Colour / Lights / Cowled Switch / Trombone Rotor

Access Control: Can be interfaced to any access control systems

**Foundations Required:** Single Rotor Turnstile Foundation: 90° - (L): 1500mm x (W): 1500mm x (D): 300mm

Single Rotor Turnstile Foundation: 120° - (L): 1500mm x (W): 1500mm x (D): 300mm Twin Rotor Turnstile Foundation: 90° - (L): 2200mm x (W): 1500mm x (D): 300mm

Twin Rotor Turnstile Foundation: 120° - (L): 2200mm x (W): 1500mm x (D): 300mm

Electrical Supply: 230v 50Hz 2 amp supply single phase



## Manual Swing Gates SR1

# A security rated swing gate solution







#### Features & Benefits

- Supplied in either Duo8 or HiSec 358 mesh infills
- Available in heights of 1.8, 2.0, 2.4 and 3 mtrs
- Supplied in either single leaf or double leaf options
- Single leaf maximum width 1.6 mtrs
- Double leaf maximum width 7.1 mtrs
- In-ground or base plated post fixing
- Available in your choice of RAL colours
- Supplied with SR rated locks

Zaun's range of SR1 Rated Gates are manufactured specifically with security in mind. Our SR1 rated gates have been tested and approved to LPS 1175 Issue 7 by the Loss Prevention Certification Board (LPCB) and tested by the Buildings Research Establishment (BRE). This testing processed has led to our products being entered into The RED BOOK.

Our SR1 Rated Gates are designed to be suitable for either pedestrian or vehicle access and are the perfect accompaniment to our SR rated fencing solutions. Each gate is can be supplied with welded mesh infills Duo8 or HiSec 358. All products approved by LPCB are rigorously tested for resistance to deliberate attack and play an important role in protecting people and property against physical attack, burglary, vandalism and terrorism. Our SR1 rated gates' LPS 1175 approval specifically covers the approval and listing of intruder resistant building components, strong points, security enclosures and free-standing barriers.

These SR1 rated gates have been designed with an additional over clip and special shear-drive bolts to the top and bottom of the mounting post of Zaun's standard Duo8 gate to give the gates their SR1 rating. For the HiSec 358 gate a clamp bar at the side of the gate post is included with through bolts and stainless steel fixings. All versions of our SR1 rated gates are supplied with an SR-rated padlock as standard and can be supplied in your choice of RAL colour.









## **Specifications**

**Heights**: 1.8m, 2.0m, 2.4m or 3m

Width: Single Leaf (1.6m max), Double Leaf (7.1m max)

Infill: Duo8 or HiSec 358

**Lock**: Slide latch lock with SR rated padlock



## Manual Swing Gates SR2

# High security SR rated swing gates







#### Features & Benefits

- Supplied in HiSec Super 10 mesh infills
- Available in heights of 1.8, 2.0, 2.4 and 3 mtrs
- Either single leaf or double leaf
- Single leaf maximum width 1.6 mtrs
- Double leaf maximum width 7.1 mtrs
- In-ground or base plated post fixing
- Available in your choice of RAL colours
- Supplied with SR rated slide latches and padlocks

Zaun's range of SR2 Rated Gates are manufactured specifically with security in mind. Our SR2 rated gates have been tested and approved to LPS 1175 Issue 7 by the Loss Prevention Certification Board (LPCB) and tested by the Buildings Research Establishment (BRE). This testing processed has led to our products being entered into The RED BOOK.

These SR2 Rated Gates are designed to be suitable for either pedestrian or vehicle access and are the perfect accompaniment to our HiSec Super SR2 rated fencing solutions. Each gate is supplied with HiSec Super SR2 welded mesh infills. All products approved by LPCB are rigorously tested for resistance to deliberate attack and play an important role in protecting people and property against physical attack, burglary, vandalism and terrorism. Our SR2 rated gates LPS 1175 approval specifically covers the approval and listing of intruder resistant building components, strong points, security enclosures and free-standing barriers.

Each of our SR2 rated gates have been designed with a clamp bar at the side of the gate post is included with through bolts and stainless steel fixings. An additional sheath is added to the slide latch locking system to provide the gate with additional protection against potential attacks. All of our SR2 rated gates are supplied with an SR-rated padlock as standard and can be supplied in your choice of RAL colour.

Available in single leaf and double leaf versions and supplied up to a maximum width of 7 mtrs (double leaf version).









## **Specifications**

**Heights**: 1.8m, 2.0m, 2.4m or 3m

Width: Single Leaf (1.6m max), Double Leaf (7.1m max)

Infill: HiSec SR2

**Lock**: Slide latch lock with SR rated padlock



## **Pedestrian Gates**

# Bespoke gate solutions for any perimeter







#### Features & Benefits

- Bespoke designed gates to suit all applications
- Available with your choice of infills and colours
- Designed to suit any width and height you require
- Suitable for use with manual and electronic locks
- Access control options can be applied \_\_\_\_\_\_

Zaun's range of pedestrian gates are ideal for installation adjacent to any automated vehicular gate. Or as a pedestrian access point within a fence line. Designed to provide a safe access route for pedestrian traffic to and from site. A range of bespoke pedestrian gates, available for use with perimeter security fencing systems or sports fencing solutions.

All of our Pedestrian Gates, designed with your choice of welded mesh, woven mesh, vertical bar, solid plates, sheets or timber infills to match any fence line. Our bespoke manufacturing capabilities ensures that we can design gates for almost any requirement or size in almost any RAL colour to suit the environment or branding of the site. Manufactured to British Standards (BS) from fully welded steel section with a wide range of infill options and available with a variety of security locking systems including Locinox locks, electric release, electric lock, fail safe or secure options.

Each of our pedestrian gates can also be controlled using a manual lock or via access control, remote push buttons, video entry, remote free exit buttons or latching lock release / handles to name a few. Also supplied with or without closers. Each gate can also be supplied with a range of topping options to provide additional security. An additional mesh over panel can also be provided to encase the gate within the fence line.





## **Specifications**

**Heights**: 400mm to 5 mtrs (other heights available upon request)

Width: Single Leaf (600mm - 10.0m), Double Leaf (1.2m to 14.0m) (other widths available)

Infill: Your choice of welded mesh, solid sheet or railing

Accessories: Your choice of slide latch, locks, closers, dropbolts & access control



## Manual Swing Gates

# Gates designed to match fence line







#### Features & Benefits

- Bespoke design to suit fence line
- Aesthetically pleasing and easy to operate
- Ideal for sites that occasionally require vehicle access
- Available with your choice of infill from welded and woven mesh to vertical bar and solid sheets
- Supplied in almost any RAL colour required
- Can be supplied with a range of locking and access control options

Zaun's range of manual vehicle gates, ideally installed onto sites that occasionally require vehicle access. All of our manual vehicle gates, available in single or double leaf. All vehicle gates can be designed with your choice of infill to match any fence line. Infills are available in welded mesh, woven mesh, vertical bar, solid panels or timber.

Our bespoke manufacturing capabilities ensures that we can design gates in any size and configuration. Suitable for almost any requirement or size and can be provide in almost any RAL colour. Typically our manual vehicle gates are available in heights of between 1.8 metres and 4.0 metres high. Single leaf vehicle gates are available between 1.2 m and 3.6 m wide (or a width to suit), framed in rectangular hollow section and typically supplied with a slide latch, rubber bump stop and 2 x suitable gate posts, although other options are available to suit customer requirements.

Double leaf vehicle gates are available between 2.0 m to 7.2 m wide (or a width to suit), framed in rectangular hollow section and typically supplied with drop bolts, slide latch, rubber bump stop and 2 x suitable gate posts, although other options are available to suit customer requirements. Manufactured to British Standards (BS) from fully welded steel section with a wide range of infill options and can also be provided with a range of locking systems including a variety of Locinox systems, electric release, electric lock, fail safe or secure options. Each system may be galvanised only or galvanised and polyester powder coated in your choice of RAL colours.





## **Specifications**

**Heights**: 1.8m to 5.0m (other sizes are available upon request)

Leaf: Single Leaf: 2.0 m to 10.0 m / Double Leaf: 2.0 m to 14.0 m

Infill: Your choice of welded mesh, solid sheet or railing

Accessories: Your choice of slide latch, locks, closers, dropbolts & access control



## **Prison Gates**

# High security gates to prison standards





## Features & Benefits

- Manufactured to MoJ specifications
- Supplied with your choice of locking and access control systems
- Available in single leaf or double leaf options
  - Blends seamlessly into the fence line
- Provides excellent visibility
- Available with your choice of mesh cladding or privacy screening

Zaun's range of MoJ approved prison style gates are designed specifically to the specifications supplied by the Ministry of Justice. Each prison gate is supplied on round prison posts and clad with either HiSec 358 mesh, HiSec DualSkin mesh or solid panels. Designed specifically to match the fence line, the prison gates blend seamlessly into the perimeter security.

Each gate can be supplied with your choice of approved locking system, depending on security required. Our range of prison gates are available in either single leaf or double leaf options and can be provided with access control solutions. Each gate can be supplied with a range of topping options to provide additional security. A mesh over panel can also be provided to encase the gate within the fence line.



## **Specifications**

Height: Single Leaf (2m) / Double Leaf (4.1m)

Width: Single Leaf (1.2m) / Double Leaf (3.8m)

Infill: HiSec clad on inside and outside (also available with privacy sheet)

Posts: Round prison posts
Frame: Round tubular frame

**Accessories**: Approved locking system & dropbolts



# Sapphire Manual Sliding Gates

# Bespoke sliding gate solutions



#### Features & Benefits

- Ideal for limited space or uneven
- Available with your choice of mesh, solid panel or railing infill
- Opening width of up to 15m Available in galvanised only or your choice of RAL colours
- Compact shipping & ready to assemble on site
- Requires smaller lifting plant equipment
- For new or existing fence lines

Sapphire Manual Sliding Gates from Zaun, commonly used when other gate installations are not possible. Ideal for situations where there is limited space or uneven ground. Each manual sliding gate manufactured and designed by Zaun to customer specifications. The Sapphire sliding gates offer a high degree of flexibility. Allowing us to design a gate that fits your requirements exactly. These manual sliding gates use a trackless cantilever system. Supplied with a height of up to 2.4 metres with a drive through width of between 3 metres up to 15 metres.

Manual sliding gates supplied with your choice of Zaun mesh, vertical bar, solid sheet or other options upon request. Providing an attractive feature to complement your perimeter fencing solution. Also supplied with your choice of sliding gate locking mechanism and slam and support posts to attach to new or existing fence lines.

The unique design also makes the manual sliding gates easy to handle and ready to assemble on site. Ensuring that the are smaller plant lifting equipment required. The easy to assemble gates also provide customers with a compact shipping solution. Each manual sliding gate is also available with a range of security topping options to provide you perimeter with additional security.



## **Specifications**

Height: 1.4m to 2.4m

Width: 3m to 15m (in 1m increments)

Infill: Your choice of mesh, solid sheet or vertical bar railings

Posts: RHS Slam and Support Posts

Frame: **RHS Frame** 

Accessories: Sliding Gate Lock / Optional one sided access

## Galvanising



All of our posts, gates and panels are galvanised, with the majority of our steelwork receiving a hot-dip galvanised finish to BS EN 1461:1999. Hot dip galvanising guarantees maximum protection, with a minimum of 50 years corrosion resistance\*.

It is a dipping process in which fluid zinc alloys to the steel surface. The zinc will penetrate all recesses and open hollow surfaces. In order to achieve this with hollow tubes like posts and gate frames, they are 'vented' which means that the zinc can flow inside the tube – hence a protective zinc coating is not only applied to the outside of the steel work but to the inside as well.

Prior to dipping, the steel work goes through 8 stages of pretreatment. Firstly this involves 6 acid tanks of increasing strength, which degrease the surface and remove impurities. The steel is then rinsed in an iron free water before being initially heated to 75° in the flux tank, which will evaporate all water from the steel.

The steel is then dipped in the zinc tank, during which a flux solution is sprayed on to help the zinc flow over the metal. The galvanised metal is then carefully removed from the tank at a specific angle, to help the excess zinc flow off. The metalwork is then cooled in water prior to fettling if required.

## **Powder Coating**



Polyester Powder coating is a complex organic colour layer available as an option on all of our fencing products. The process offers an extended life for the fence and gives it a bright colour coating, available in over 60 standard colours and over 1000 non-standard colours in both the RAL and British Standard ranges. Zaun's powder coatings meet the requirements of BS 6497 which include subjecting the galvanised steel to a multi-stage pre-treatment prior to the organic powder coating being applied. This pre-treatment ensures that our coatings offer the highest level of performance on the market.

#### Features of Zaun's Powder Coated Finish:

- Up to 25 year life expectancy
- Reduced chipping during installation avoiding touch up
- Assured quality to BS6497 thanks to a continually monitored process with on-line computer controlled processing
- Available in a wide range of colours
- · Resistant to ultra-violet induced colour and gloss change
- Long term adhesion retention
- Resistant to salt spray and environmental pollution
- If coating gets damaged, corrosion will not spread to other areas of metal
- Graffiti resistant can be cleaned using benzene, turpentine or methylethylketone
- Low maintenance

## Professionalism in every area |

Zaun Group supply perimeter and sports fencing and associated equipment to fencing contractors and end users such as local authorities and corporate bodies. A design, manufacture, supply and installation service is offered.

Zaun Group is committed to the provision of total Quality Assured goods and service to meet all customer specified needs and expectations and all associated regulatory requirements. This is accomplished by holding regular meetings and setting objectives and targets for on going improvement in performance and resources in order to meet current and future customer and regulatory demands.

To ensure consistent performance to the specified requirements the company implements an effective quality system meeting the requirements of BS EN ISO 9001:2008.

The quality system and general organisation is described in the quality policy manual.

Detailed working instructions to company employed personnel are contained in a separate series of quality control procedures which are referred to in the quality policy manual.

The quality programme laid down in the quality policy manual and associated quality control procedures has the full support of the management and it is a mandatory requirement that all personnel involved will comply with the defined policies, systems and procedures. It is the responsibility of company management, that all company personnel thoroughly understand the company quality policy and the requirements for implementation.









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