

The logo features the letters 'ABC' in a large, bold, yellow font. The 'A' is stylized with a triangular shape inside it. Below the 'ABC' is the text 'Avon Barrier' in a smaller, bold, yellow font. The background consists of a pattern of diagonal lines in shades of gray and black, creating a striped effect. A solid yellow vertical bar is located on the right side of the page.

ABC

Avon Barrier

Hostile Vehicle Mitigation Solutions

Company Profile



Avon Barrier was originally founded in 1989 and has consistently developed and improved its product range of Hostile Vehicle Mitigation (HVM) solutions to meet the changing demands of the security market. Ancillary support equipment, associated system design, installation and maintenance services have been developed simultaneously to offer a full turn-key solution to end-users.

We are an international ISO 9001 accredited organisation recognised for our high quality engineering and manufacturing with a wide range of PAS 68, IWA 14-1 & ASTM F2656-07 tested high security products. The international head office of the company is based in the UK alongside a large manufacturing facility housing design, fabrication, project management, technical support and both UK and European sales offices. Other international regions are supported by sales and technical staff who work in conjunction with fully trained and certified distributors and approved suppliers.

The list of successfully completed installations worldwide runs to in excess of ten thousand and support is provided by both Avon Barrier regional products support teams, as well as our distributor network.

We look forward to being of service to you.

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Crash Test Program



The key to critical infrastructure protection from Vehicle Borne Improvised Explosive Device (VBIED) is a combination of access restriction and approach speed management and whilst careful planning and layout design can assist with the restriction of approach speed, the final line of defence is the blocking system.

As Vehicle Security Barriers (VSBs) are designated as life saving equipment, it is essential that they are suitable to combat today's ever increasing threat types. The equipment developed by Avon Barrier has therefore been extensively tested in a number of ways to ensure that when it needs to perform, it will play its part.

Testing work undertaken to date includes dynamic impact testing with a variety of different impact forces, penetration testing and explosive shrapnel dispersal testing.

In today's environment higher levels of perimeter protection are increasingly necessary and design consultants are tasked with ensuring that installations are not only safe and secure in the current climate but are also future proofed against an escalating threat level.

Avon Barrier's commitment to protection extends to the provision of a frontline service to design consultants to assist in the correct specification and design of security control points.

Crash Test Program



What is PAS 68 & IWA 14-1?

PAS 68 & IWA 14-1 have been prepared to address the needs of organisations who wish to have assurance that vehicle security barriers (VSBs) will provide the level of impact resistance that they seek.

In the UK, the CPNI (Centre for Protection of National Infrastructure) in conjunction with other stakeholders developed the PAS 68 classification. This has now been replaced with the International Works Agreement (IWA) 14-1, combining elements of both PAS 68 and the US classification ASTM 2656-07.

PAS 68 & IWA 14-1 specifies the essential impact performance requirement for a VSB and a test method for rating its performance when subjected to a single impact by a test vehicle not driven by a human being.

A PAS 68 & IWA14-1 performance rating is designated to each product that has been impact tested; this classification code should be available to confirm the test results.

Interpreting the PAS 68 Classification Code

V/7500(N2)/80/90/0/1.2						
V	7500	(N2)	80	90	0	1.2
Vehicle	Test Weight of Vehicle (shown in Kg)	Vehicle Class	Speed of Vehicle (shown in KPH)	Angle (angle at which the vehicle hit the barrier)	Penetration of Vehicle (shown in metres)	Dispersion (debris dispersion shown in metres)

Interpreting the IWA 14-1 Classification Code

IWA 14-1 Bollard V/7200(N2A)/64/90/1.2					
V	7200	(N2A)	64	90	1.2
Vehicle	Test Weight of Vehicle (shown in Kg)	Vehicle Class	Speed of Vehicle (shown in KPH)	Angle (angle at which the vehicle hit the barrier)	Penetration of Vehicle (shown in metres)

Other International Testing Standards:

A European CEN workshop agreement CWA 16221:2010 combined detail from BSI PAS 68 & PAS 69

International Workshop Agreements IWA 14-1 & IWA 14-2, combines elements of EU and the US testing criteria.

Department of State (DOS) Crash Test Certification SD-STD-02.01, Revision A, March 2003 - Test Method for Vehicle Crash Testing Of Perimeter Barriers and Gates.

The DOS SD-STD-02.01 has been superseded by ASTM F2656-07 Standard Test Method for Vehicle Crash Testing of Perimeter Barriers.

Standard	Rating	Vehicle Weight (lbs)	Vehicle Speed (mph)	Rating	Allowable Truck Bed Penetration (ft)
DoS K-Ratings	K- Rating			L-Rating	
	K4	15,000	30	L1	20-50
	K8	15,000	40	L2	3-20
	K12	15,000	50	L3	<3
ASTM F2656-07 Standard	M-Designation			P-Rating	
	M30	15,000	30	P4	>98
	M40	15,000	40	P3	23.1-98.4
	M50	15,000	50	P2	3.31-23
				P1	<3.3

RB1000CR Centurion Road Blocker



Avon RB1000CR Centurion Road Blocker provides a high level of security against unauthorised vehicle access.

The blocker has a 1000mm high blocking segment and is designed as a Hostile Vehicle Mitigation (HVM) solution providing protection to sites from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack.

Physically impact tested in accordance with the US standard ASTM F2656-07 by the Motor Industry Research Association (MIRA), achieving an M50 P1 rating and remaining operational after impact.

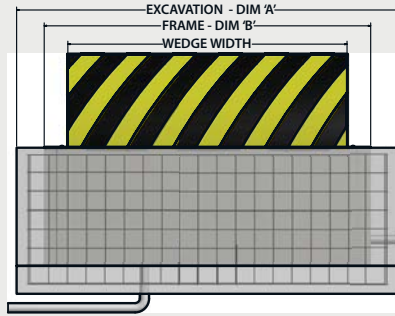
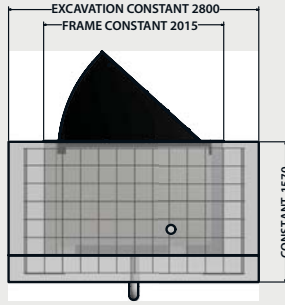
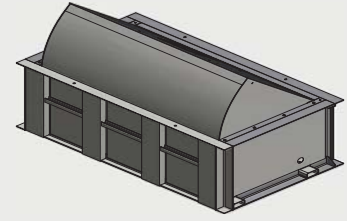
Developed and manufactured by engineers with significant experience in the fields of physical security and vehicle access control, it is a highly dependable security product that will easily interface with a wide range of control equipment.

Assembled in our fabrication facilities using heavy gauge materials to give maximum strength and durability, the RB1000CR Road Blocker is an ideal product to protect high security establishments, iconic buildings and critical infrastructure.

The road blocker comes with a push-button control as standard, however it can be customised to interface with a wide range of access control equipment to suit specific customer requirements (available as options).

The blocker is also available as an optional HCIS Road Blocker specifically designed to comply with the Kingdom of Saudi Arabia's (KSA) Ministry of Interior, HCIS Security Directives Sec 06 4.3.3 for crash barriers.

RB1000CR Centurion Road Blocker



RB1000CR ASTM ROAD BLOCKER WIDTH OPTIONS		
WEDGE WIDTH	DIM 'A'	DIM 'B'
2M	3100	2508
3M	4100	3508
4M	5100	4508
5M	6100	5508
6M	7100	6508

Physical Dimensions:	3m Road Blocker - 3508mm W x 2015mm D x 1280mm H Blocker widths available 2-6 metres in 500mm increments	Raised height of blocking segment 1 metre
Basic Power Requirements:	3-Phase 380/415V AC, 50/60Hz	
Control Voltage:	S.E.L.V 24v	
Performance:	Loading 30 Tonnes	
ASTM Classification:	ASTM F2656-07 M50 P1	
Tested Model:	3 Metre blocking segment 1m high blocking segment (raised)	
Speed of Operation:	6 Seconds to raise or lower (alternative speeds available as option)	
Emergency Fast Raise (option):	<1.5 seconds to raise Emergency Fast Operation (EFO)	
Operating temperature ranges available (option):	-25°C - +75°C (variables available as options)	
Operating humidity range available (option):	5% to 100% (non condensing)	
Construction:	The supporting framework is constructed from fully welded, heavy gauge, high strength, structural steels completely encased with steel sheets to provide a self-shuttered module. Sub-surface fixing points ensure the blocker is completely secured to its foundation. It is constructed from steel that complies with ASTM A514/517* *Or European equivalent EN standards.	

Features

- Physically impact tested ASTM F2656-07 M50 P1
- Manufactured from heavy gauge materials
- Manual hand pump facility
- Programmable logic control system
- 100% duty cycling
- Fully clad base

Benefits

- Confidence in proven performance
- Strong and durable
- Operational under power failure conditions
- Flexibility to interface with all forms of access control
- Reliable and dependable
- Simple to install

Options available

Where the blockers control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system.

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a blocker controlled roadway, additional safety measures can be incorporated into the blocker system if required.

- Fully compliant HCIS road blocker
- Emergency fast raise system
- Emergency buttons with lock down
- LPS 1175 cabinets available for HPU
- Speed of operation 3-5 Seconds
- Access and intercom systems
- UPS backup for the electrical system
- Interlocking systems to give air-lock type protection on sites with higher threat levels
- Operating temperatures & environments
- Inductive loop systems
- Traffic lights and back-indications systems
- Integral inset warning lights in blocking segment
- Accumulator systems (fail secure) for hydraulic operation in power failure conditions

RB780CR Chieftain Road Blocker



Avon RB780CR Chieftain High Security Road Blocker provides a high level of security against unauthorised vehicle access, designed to withstand direct impact forces in excess of 1,852 KJ, the RB780CR road blocker is a Hostile Vehicle Mitigation (HVM) solution providing protection to sites from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack.

It has been independently, structurally evaluated by the Transport Research Laboratory (TRL) and has also been physically tested in a number of full scale crash tests conducted in accordance with PAS 68 by the Motor Industry Research Association (MIRA). This led to the RB780CR Chieftain High Security Road blocker becoming one of the first British built road blockers to be installed by the British Government.

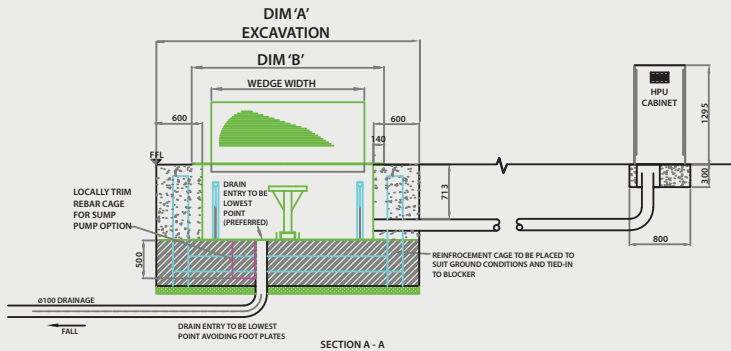
Designed and manufactured by engineers with significant experience in the fields of High Security and Access Control, the RB780CR is a highly dependable security product that will easily interface with a wide range of control equipment.

Units are assembled in our fabrication facilities using heavy gauge materials to give maximum strength and durability. This makes the RB780CR the ideal product to protect high security establishments, iconic buildings and critical infrastructure.

The RB780CR is an electro-hydraulically operated blocking system with segment widths available from 2m to 6m (in 500mm increments). The unit has an 800mm height when fully raised and is comprised of a static sub-surface ground frame with hinged, rising impact wedge. Raised/Lowered back indication signalling can be provided to enable remote monitoring of the blocker status on a real time basis (optional).

The hydraulic power pack is controlled by a programmable logic controller (PLC) enabling connection of virtually any access control to the blocker. In addition, the PLC can be configured to enable the blocker to be raised quickly (under 1 second) in an emergency by utilising an hydraulic accumulator (optional). In the event of power failure a manual pump is provided to ensure operator control is maintained.

RB780CR Chieftain Road Blocker



WEDGE WIDTH	DIM 'A'	DIM 'B'
2M	3430	2510
2.5M	3930	3010
3M	4430	3510
3.5M	4930	4010
4M	5430	4510
4.5M	5930	5010
5M	6430	5510
5.5M	6930	6010
6M	7430	6510

Physical Dimensions:	HPU Cabinet - 640/940mm W x 670mm D x 1300mm H	2m Road Blocker - 2510mm W x 1770mm D x 1000mm H
Basic Power Requirements:	3-Phase 415v AC, 50Hz, (other voltages are available)	
Control Voltage:	S.E.L.V 24v	
Performance:	Loading 30 Tonnes	
Impact Absorption:	1852KJ (fully operational immediately after impact)	
Full PAS 68 Classification:	V/7500(N2)/80/90:0/17	
Tested Model:	800mmHx2.0mW	
Speed of Operation:	6 Seconds to raise or lower (other speeds available)	
Emergency Fast Operation (EFO) (option):	<1 seconds to raise	
Operating temperature range available (option):	-25°C - +70°C	
Construction:	The supporting framework is constructed from fully welded, heavy gauge, high strength, structural steels completely encased with steel sheets to provide a self-shuttered module. Sub-surface fixing points ensure the blocker is completely secured to its foundation.	

Features

- Multiple testing (5 different / independent physical tests)
- Independently structurally evaluated
- Physically impact tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Manual hand pump facility
- Programmable logic control system
- 100% duty cycling
- Fully clad base

Benefits

- Comprehensive understanding of attack resistance
- Protection from multi-direction impact approach
- Confidence in proven performance
- Strong and durable
- Operational under power failure conditions
- Flexibility to interface with all forms of access control
- Reliable and dependable
- Simple to install

Options available

The blocker comes with a push-button control as standard. However, it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard emergency systems. Where the blocker control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights and inductive loop systems. **For safety reasons pedestrians, cyclists and motorcycles are advised not to use a blocker controlled roadway, additional safety measures can be incorporated into the blocker system if required.**

- Emergency fast raise, lock down buttons
- LPS 1175 cabinets available for HPU
- Accumulator systems for hydraulic operation in power failure conditions
- Access and intercom systems
- UPS backup for the electrical system
- Interlocking systems to give air-lock type protection on sites with higher threat levels
- Inductive loop systems
- Traffic lights and back-indications systems
- Integral inset warning lights in blocking segment

RB880CR Defender Road Blocker



The Avon RB880CR Defender Shallow Road Blocker provides a high level of protection where deeper foundations are not possible / practical. With a shallow foundation the RB880CR Defender crash tested security road blocker is designed to complement the Avon Barrier range of Hostile Vehicle Mitigation (HVM) solutions. The RB880CR road blocker can withstand direct impact forces of 1,852 KJ, providing shallow mounted protection to sites from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack.

The high security road blockers were developed by our in-house engineering team to overcome specific site limitations and using the experience gained with the design, testing and production of the RB780CR Road Blockers, RB880CR is an additional highly dependable security product that will easily interface with a wide range of control equipment.

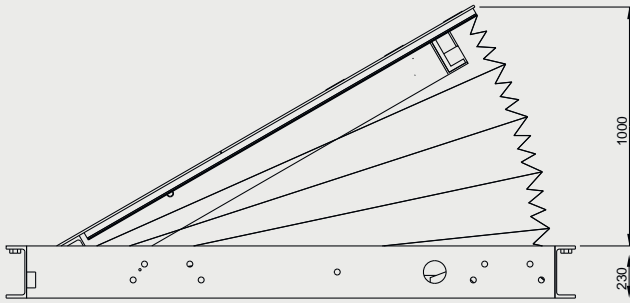
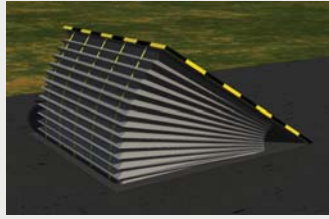
Units are assembled in our fabrication facilities using heavy gauge materials to give maximum strength and durability. This makes the RB880CR an ideal product to protect high security establishments, iconic buildings and critical infrastructure where existing underground services or other depth restrictions are an issue.

The RB880CR Road Blocker has been independently physically tested in a number of full scale crash tests conducted in accordance with PAS 68 by the Transport Research Laboratory (TRL). This led to the RB880CR Defender High Security Road Blocker becoming the first British built shallow foundation road blockers installed by the British Government.

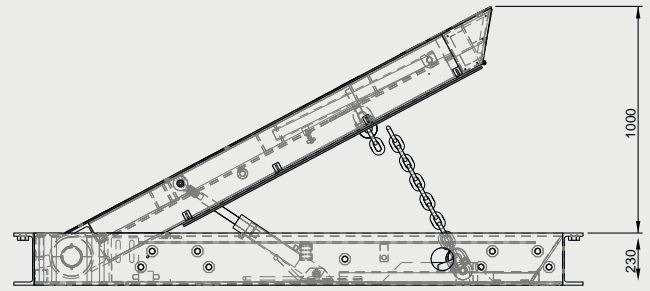
The RB880CR is an electro-hydraulically operated blocking system with a standard segment width of 2m or 3m. The blocker has an imposing 1m height when fully raised and is comprised of a static sub-surface ground frame with foundation support legs and a hinged, rising impact wedge. Raised/Lowered back indication signalling can be provided to enable remote monitoring of the blocker status on a real time basis (optional).

The hydraulic power pack is controlled by a programmable logic controller (PLC) enabling connection of virtually any access control to the blocker. In addition, the PLC can be configured to enable the road blocker to be raised quickly (under 1 second) in an emergency by utilising a hydraulic accumulator (optional). In the event of power failure a manual pump is provided to ensure operator control is maintained. The blocker can also be fitted with an optional debris protection skirt.

RB880CR Defender Road Blocker



RB880_106 SKIRT ASSEMBLY



Physical Dimensions:	HPU Cabinet - 640/940mm W x 670mm D x 1300mm H Road blockers - 2520mm x 2210mm x 240mm - 2m Blocker 2520mm x 3210mm x 320mm - 3m Blocker
Basic Power Requirements:	3-Phase 415v AC, 50Hz, (other voltages are available)
Control Voltage:	S.E.L.V 24v
Performance:	Loading 20 Tonnes
Impact Absorption:	1852KJ (fully operational immediately after impact)
Full PAS 68 Classification:	V/7500(N2)/48/90:0/0 & V/7500(N2)/80/90:0/0
Tested Model:	1m H x 2m W
Speed of Operation:	6 Seconds to raise or lower
Emergency Fast Operation (EFO) (option):	<1 second to raise
Operating temperature range available (option):	-25°C - +70°C
Construction:	The supporting framework is constructed from fully welded, heavy gauge, high strength structural steels. Foundation support legs are provided to create a linked foundation enabling the impact forces to be distributed over a larger shallow area.

Features

- Multiple testing (4 different independent tests)
- Road blockers shallow foundation / mounting from 300mm overall depth
- Physically impact tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Manual hand pump facility
- Programmable logic control system
- 100% duty cycling

Benefits

- Comprehensive understanding of attack resistance
- Overcomes site depth restrictions
- Confidence in proven performance
- Strong and durable
- Operational under power failure conditions
- Flexibility to interface with all forms of access control
- Reliable and dependable

Options available

Where the blocker control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights and inductive loop systems. It is also recommended that a debris protection skirt is fitted.

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a blocker controlled roadway, additional safety measures can be incorporated into the blocker system if required.

- | | | |
|---|--|---|
| ➤ Emergency fast raise, lock down buttons | ➤ Access and intercom systems | ➤ Inductive loop systems |
| ➤ LPS 1175 cabinets available for HPU | ➤ UPS backup for the electrical system | ➤ Traffic lights and back-indications systems |
| ➤ Accumulator systems for hydraulic operation in power failure conditions | ➤ Interlocking systems to give air-lock type protection on sites with higher threat levels | ➤ Integral inset warning lights in blocking segment |
| | | ➤ Debris protection skirt |

RB980CR Sabre Surface Road Blocker



The Avon RB980CR Sabre Surface Road Blockers provide temporary high level protection where sub-surface foundations are not practical. Designed mainly for temporary requirements the RB980CR is suitable as a high security control point for conferences or military checkpoints. Its fast deployment and high protection level makes the RB980CR ideal as a logistic support barrier for use in Theatre and support base protection.

The adaptability of the RB980CR complements the Avon Barrier range of Hostile Vehicle Mitigations (HVM) solutions and can withstand direct impact forces in excess of 1,852 KJ, providing surface mounted protection to sites from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack.

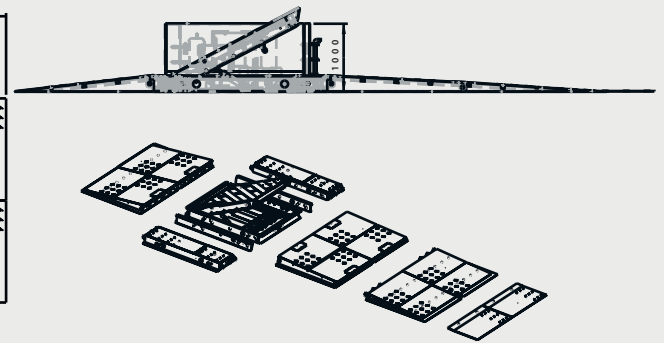
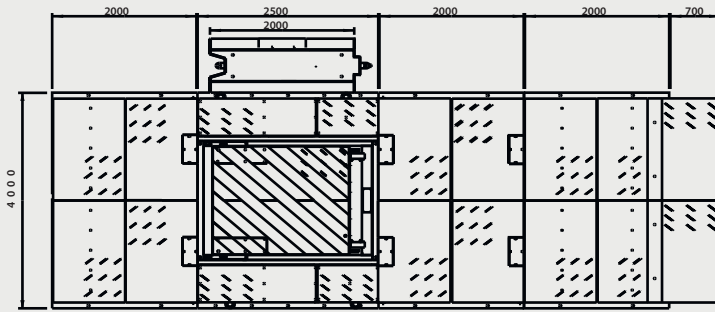
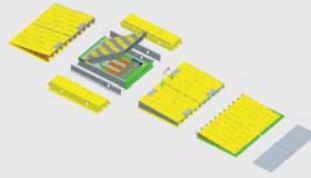
Developed in conjunction with the British Military, our in-house engineering team designed these modular road blockers to combine ease of transportation and deployment with a high level of immediate protection.

Components are assembled in our fabrication facilities using a combination of an RB880CR blocking system in conjunction with modular approach ramps constructed using heavy gauge materials to give maximum strength and durability. This makes the RB980CR the best solution to secure sites needing temporary and immediate high security protection.

The RB980CR has been independently physically tested in a number of full scale crash tests conducted in accordance with PAS 68 by the Transport Research Laboratory (TRL). This led to the RB980CR Sabre surface road blocker becoming the first British built impact resistant surface mounted road blocker approved for use by the British Government.

The RB980CR Sabre surface road blocker is an electro-hydraulically operated blocking system with a segment width of 2m. The unit has a significant 1m height when fully raised and is comprised of an RB880CR blocking system with side and approach ramps giving a standard 4m wide secured lane (can be modified to suit on request) Raised/Lowered back indication signalling can be provided to enable remote monitoring of the blocker status on a real time basis (optional).

RB980CR Sabre Surface Road Blocker



Physical Dimensions:	HPU Cabinet - 2000mm W x 1000mm D x 1000mm H (can also be smaller and positioned remote from Blocker) Road blocker - 4000mm W x 9200mm L x 240mm H (Dimensions variable to suit site requirement)
Basic Power Requirements:	3-Phase 415v AC, 50Hz, (other voltages are available)
Control Voltage:	S.E.L.V 24v
Performance:	Loading 20 Tonnes
Impact Absorption:	1852KJ (fully operational immediately after initial impact)
Full PAS 68 Classification:	V/7500(N2)/80/90:8.5/12.8
Tested Model:	1m Hx2m W
Speed of Operation:	6 Seconds to raise or lower
Emergency Fast Operation (EFO) (option):	<1 second to raise (option)
Operating temperature range available (option):	-25°C - +70°C
Construction:	The supporting framework is constructed from fully welded, heavy gauge, high strength, structural steels. Fixing points for AEH Sets, All terrain fixings, roadway fixing points are provided around the ramp kit edging, alternatively surface mounted counter weights can be provided.

Features

- Multiple testing (4 different / independent tests)
- Surface mounted road blocker - no foundations
- Modular construction
- Physically impact tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Manual hand pump facility
- Programmable logic control system
- 100% duty cycling

Options available

The surface road blocker comes with a push-button control as standard and manned guard emergency systems can be accommodated. Where the blocker control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights. It is also recommended that a debris protection skirt is fitted to the road blocker.

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a blocker controlled roadway, additional safety measures can be incorporated into the blocker system if required.

- Emergency fast raise, lock down buttons
- LPS 1175 cabinets available for HPU
- Accumulator systems for hydraulic operation in power failure conditions
- Access and intercom systems
- UPS backup for the electrical system
- Traffic lights and back-indication system
- Counter weight side barges
- Roadway fixing bolts
- Integral inset warning lights in blocking segment
- Debris protection skirt

Benefits

- Comprehensive understanding of attack resistance
- No foundation requirements
- Fast deployment, operational within 1 hour (dependent on site conditions)
- Strong and durable
- Operational under power failure conditions
- Flexibility to interface with all forms of access control
- Reliable and dependable

SB970CR Scimitar Bollards



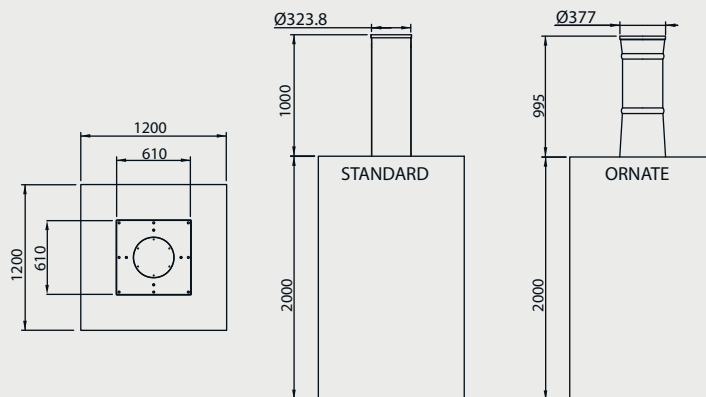
The Avon SB970CR Scimitar Security Bollard provides a high level of security against unauthorised vehicle access without the need for an outwardly aggressive appearance.

A Hostile Vehicle Mitigation (HVM) solution designed to withstand direct impact forces in excess of 1,800 KJ, the bollard provides protection from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack to sites where aesthetics and public perception are a consideration.

Designed and manufactured by engineers with significant experience in the fields of high security and access control the SB970CR is a highly dependable and yet unobtrusive security product that will easily interface with a wide range of control equipment.

Units are assembled in our fabrication facilities using heavy gauge materials to give maximum strength and durability. This makes the SB970CR an ideal product to provide low profile yet fully effective protection for high security establishments, iconic buildings and critical infrastructure.

SB970CR Scimitar Bollards



Physical Dimensions:	HPU Cabinet - 640/940mm W x 670mm D x 1300mm H Single Bollard - 610mm W x 610mm D x 2000mm H
Basic Power Requirements:	3-Phase 415v AC, 50Hz, 20 Amps (other voltages are available)
Control Voltage:	S.E.L.V 24v
Performance:	Loading 30 Tonnes
Impact Absorption:	Single SB970CR - 1852KJ (fully operational immediately after impact) Dual SB970CR - 1852KJ (fully operational immediately after impact)
Full PAS 68 Classification:	V/7500(N2)/80/90:0/25
Speed of Operation:	6 Seconds to raise or lower
Tested Model:	990mmHx323.9mm (+/-1%) dia 25mm wall thickness
Operating temperature range available (option):	-25°C - +70°C
Construction:	The unit is comprised of a static sub-surface mounting tube and impact tube. The supporting framework is constructed from fully welded, high strength, structural steel completely encased with steel sheets to provide a self-shuttered module. The 323.9mm (+/- 1%) diameter bollard is constructed using hi-tensile structural steel.

Features

- Multiple testing (single bollard / multiple bollards)
- Unobtrusive appearance
- Minimal foundation requirement (2.88 cubic metres)
- Physically impact tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Manual hand pump facility
- Programmable logic control system
- 100% duty cycling

Benefits

- Comprehensive understanding of attack resistance and confidence in individual bollard performance
- Aesthetically acceptable
- Ease of installation
- Confidence in proven performance
- Strong and durable
- Operational under power failure conditions
- Flexibility to interface with all forms of access control
- Reliable and dependable

Options available

Each bollard system comes with a push-button control as standard. However, it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard emergency systems.

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a bollard controlled roadway, additional safety measures can be incorporated into the bollard system if required. Where the bollard control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights and safety inductive loop systems.

- Traffic lights and back-indication systems
- Access and intercom systems
- Decorative sleeves (fibre glass / stainless steel)
- Emergency buttons with lock down
- Interlocking systems to give air-lock type protection on sites for higher threat levels
- UPS backup for the electrical system
- Inductive loop systems
- LPS 1175 cabinets available for HPU

Scimitar Static Bollards



Avon's Scimitar PAS 68 tested Static Bollards provide a high level of security against unauthorised vehicle access without the need for an outwardly aggressive appearance.

Scimitar fixed bollards have been designed and physically impact tested to the BSI PAS 68 standard.











The static bollard range provides protection from a range of determined threats from vandalism to the extreme of a Vehicle Borne Improvised Explosive Device (VBIED), scimitar bollards are ideal to discreetly protect sites where aesthetics and public perception are a consideration.

Impact testing has been undertaken at a variety of speeds and foundation depths providing clients with a range of bollards with varying levels of protection. The Scimitar 75/30, 75/40 & 75/50 can be adapted to removable bollards as an option.

Static bollards can be utilised for on-street or perimeter stand-off protection, an unobtrusive hostile vehicle mitigation product that can be finished to complement surrounding architecture as well as interfacing with a wider range of high security vehicle control equipment.

Scimitar Static Bollards



Scimitar Bollard Model	Scimitar 75/30	Scimitar 75/40	Scimitar 75/50	Scimitar S40 Shallow	Scimitar SB970CR Static
Vehicle Pre PAS 68 Test					
Vehicle Post PAS 68 Test					
PAS 68 Test Date	03/09/2009	16/02/2010	04/06/2010	24/05/2011	18/11/2005
PAS 68 Classification <small>V/test weight [veh class]/speed/ angle:Penetration/ dispersion</small>	V/7500(N2)/48/90:0/0	V/7500(N2)/64/90:3.3/0	V/7500(N3)/80/90:10.6/11.1	V/7500(N2)/64/90:13.8/0.0	D/7500[N2]/80/90/1852
Bollard Diameter/ Height (FFL)	219mm/1000mm	273mm /1000mm	273mm/1000mm	273mm/1200mm	323mm/1000mm
Vehicle Weight Kg	7500	7500	7500	7500	7500
Vehicle Weight Lbs	16534	16534	16534	16534	16534
Vehicle Speed MPH	30	40	50	40	50
Vehicle Speed KPH	48	64	80	64	80
DoS US Classification (US equiv. for ref only)	K4	K8	K12	K8	K12

Features

- Physically impact tested to PAS 68 criteria
- Unobtrusive appearance
- Proportionate levels of mitigation
- Manufactured from heavy gauge materials

Benefits

- Comprehensive understanding of attack resistance and confidence in individual bollard performance
- Variety of finishes including paint, stainless steel & ornate sleeves
- Customer options
- Strength and durability

SSF100 Resilience Bollards



The Avon Resilience SSF100 Bollard is a super shallow foundation bollard, designed to provide stand-off hostile vehicle protection for infrastructure without the need for deep foundations.

With a structural foundation depth of just 100mm, the bollard offers the shallowest of foundations, whilst still providing a high level of protection against aggressive vehicle attack.

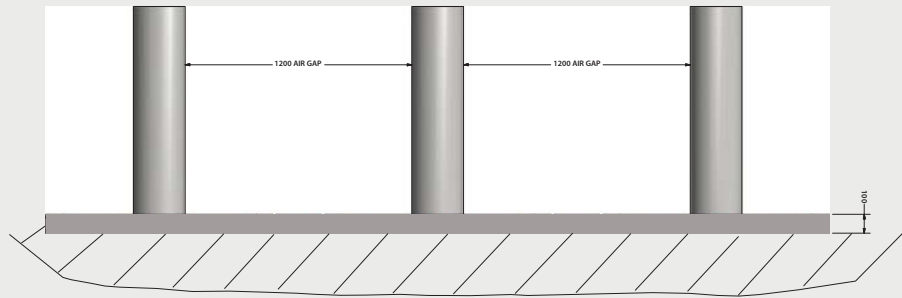
Physically tested in an array of 3 bollards to the IWA14-1:2013 Impact Test with N2A vehicle at 64kmh (40mph), it is designed & constructed to be installed with the minimum of civil excavation and its unique arrangement options enable it to be a flexible and versatile security solution.

The bollard can be customised to blend into surrounding environments, with a variety of sleeve options, including stainless steel and ornate finishes and ground finishes can include concrete, tarmac, block paving or crushed stone.

The design incorporates a unique feature to accommodate uneven surfaces, inclines, right angles or curves in bollard lines providing a full perimeter security solution.

Bollards are supplied painted black with a reflective banding as standard, other sleeve finishes are available as options.

SSF100 Resilience Bollards

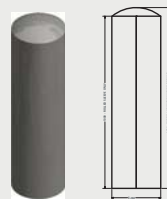


Options for stainless steel bollard finishes

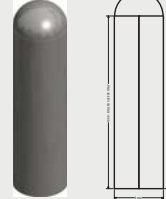
Sleeve + End Cap - Flat



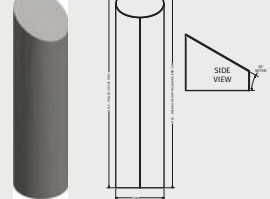
Sleeve + End Cap - Semi Dome



Sleeve + End Cap - Full Dome



Sleeve + End Cap - 30°Mitre



Physical Dimensions:	Single Bollard: Tube Diameter: 273mm Tube Height: 1000mm above ground level
IWA 14-1 Classification:	IWA14-1:2013 Bollard V/7200[N2A]/64/90:4.9
Tested Model:	1000mm above ground with a spacing of 1200mm between bollards. The bollard diameter was 273mm with a wall thickness of 16mm
Construction:	The unit is comprised of a high strength steel tube 273mm diameter mounted on an integrated steel platform. (appropriate manufacturing tolerances apply).

Features

- Physically impact tested to IWA 14-1
- Unobtrusive in appearance
- Super shallow foundation
- Alternative sleeve options
- Modular design

Benefits

- Confidence in proven performance
- Adaptable to surrounding aesthetics
- Minimal civil installation
- Overcomes site depth restrictions
- Full perimeter security

Options available

Please note this is a specialist high security product and a full site risk assessment must be carried out at design stage to ensure all relevant safety systems are included.

- Stainless Steel Sleeves
- Bespoke Ornate Sleeves
- Dome / Mitre / Flat tops
- Lights
- DDA Compliant Banding

EB950CR Armstrong Barrier



Avon EB950CR Armstrong Security Barriers provide a high level of protection where central roadway foundations are not possible / practical. Designed to complement the Avon Barrier range of Hostile Vehicle Mitigation (HVM) solutions, the EB950CR PAS 68 impact tested barrier can withstand direct impact forces in excess of 720 KJ, the barrier provides shallow mounted protection to sites from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack.

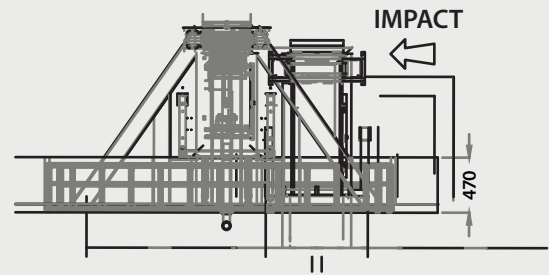
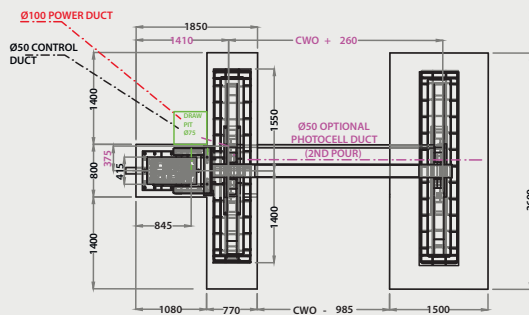
Developed by our in-house engineering team using the Company's significant historical expertise in rising arm barrier solutions coupled with the experience of impact resistance theory, the EB950CR is a highly dependable security product that will easily interface with a wide range of control equipment. Assembled in our fabrication facilities using heavy gauge materials to give maximum strength and durability. The EB950CR is a traditional looking control barrier with the benefits of high level physical protection.

The EB950CR has been independently physically tested in a number of full scale crash tests conducted in accordance with PAS 68 by the Transport Research Laboratory (TRL).

The EB950CR is an electro-hydraulically operated rising arm barrier with arm widths of up to 4.5m span . The barrier arm sits 1 m above the roadway and is supported by 2 side support frames. During impact the arm slides into a locked position protecting the main drive mechanism from damage. Raised/Lowered back indication signalling can be provided to enable remote monitoring of the barrier status on a real time basis (optional).

The hydraulic power pack is controlled by a programmable controller enabling connection of virtually any access control to the rising arm barrier. In the event of power failure a manual pump is provided to ensure operator control is maintained.

EB950CR Armstrong Barrier



Physical Dimensions:	600mm W x 890mm D x 1230mm H Barriers Arm - 5m max Barriers catcher foundations - 1500mm W x 3600mm D x 470mm H
Basic Power Requirements:	Single phase 220v AC, 50Hz, Min 16 Amps (dependent on configuration)
Control Voltage	S.E.L.V 24v
Impact Absorption:	723KJ (fully operational immediately after impact)
Full PAS 68 Classification:	V/7500(N2)/48/90:0/0
Tested Model:	1m H x 3m W
Speed of Operation:	6 - 10 Seconds to raise or lower
Operating temperature range available (option):	-25°C - +70°C
Construction:	The boom catcher frames are fabricated from heavy steel sections, which are anchored into the foundations: they are designed to support the boom in the lowered position and to take a full impact load. The recess in the catchers prevents the boom from lifting when impacted. Outboard extensions inhibit the vehicle running up the catcher frame. The boom is fabricated from heavy steel section clamped to a lift yoke which is designed to slip through its clamp in the event of a collision, to engage under the catcher frame recesses. The lift assembly comprises twin cranks welded to a solid shaft, which rotates in non-metallic bearings. A heavy-duty steel yoke is welded to the outer ends of the shaft. The crank is rotated through 90 degrees by the action of a hydraulic cylinder. Main barrier cabinet is constructed from steel plate; it houses the hydraulic equipment/reservoir, drive mechanism and electrical enclosure.

Features

- Physically impact tested to PAS 68 criteria
- Shallow mounting from 450mm overall depth
- Manufactured from heavy gauge materials
- Manual hand pump facility
- Programmable controller
- 100% duty cycling

Benefits

- Confidence in proven performance
- Overcomes site depth restrictions
- Strong and durable
- Operational under power failure conditions
- Flexibility to interface with all forms of access control
- Reliable and dependable

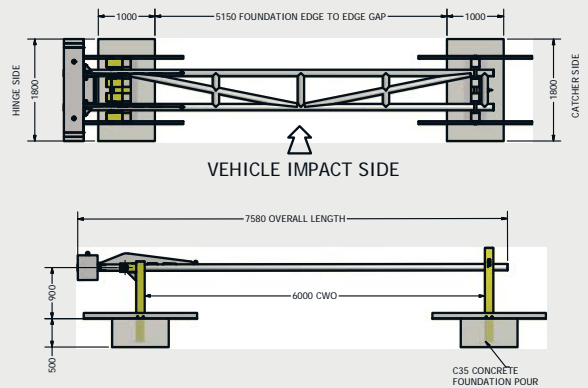
Options available

The barrier comes with a push-button control as standard. However, it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard emergency systems.

Safety - this is an armoured high security vehicle barrier and is designed not for use in areas used by pedestrians, cyclists or motorcycles additional safety measures can be incorporated into the barrier system if required. Where the barrier control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights and safety inductive loop systems.

- Access and intercom systems
- Emergency buttons with lock down
- Accumulator systems for hydraulic operation in power failure conditions
- Integral inset warning lights
- UPS backup for the electrical system
- Interlocking systems to give air-lock type protection on sites with higher threat levels
- Inductive loop systems
- Traffic lights and back-indications systems

Avon Cedar Gate



The Avon Cedar Gate has been designed and developed around the original Avon MDA barrier and Newey barrier, a UK government design of security gate providing a cost effective means of securing an entry or exit point whilst still providing a high level of protection.

The manually operated lifting gate is a Hostile Vehicle Mitigation (HVM) solution, ideal for low volumes of traffic flow or where the access point is used infrequently.

The gate has been physically impact tested independently a number of times, in accordance with PAS 68 using 7500kg N2 vehicle travelling at 48kph (30mph) by the Transport Research Laboratory (TRL) and MIRA Ltd.

Impact tests have included 3 metre, 4.5 metre & 6 metre clear width opening models of the gate providing a physical protection to sites from extreme Vehicle Borne Improvised Explosive Device (VBIED) attack.

Physical Dimensions:	900mm H x 1800 mm x 500 mm H Gate aperture – 3m - 6m Max
Operation:	Manual
Impact absorption:	7500kg @ 48kph
PAS 68 Classification:	V/7500(N2)/48/90:0.3/0.0 - 6m model V/7500(N2)/48/90:0/0 - 4.5m model
Tested models:	3m, 4.5m & 6m Gate aperture
Construction:	The Boom Catcher Frames are fabricated from heavy structural steel sections, which are anchored into the foundations: they are designed to support the boom in the lowered position and to take a full impact load. The barrier is constructed from heavy duty steel.

Features

- Confidence in security performance
- Strong and durable
- Ease of installation
- No power supply required

Benefits

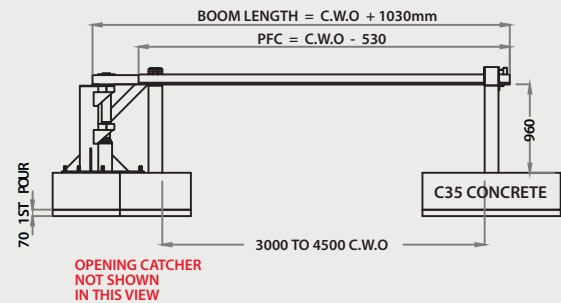
- Physically crash tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Simple to install
- Manually operated

The Avon Cedar Gate is a manually operated lifting gate available with a range of clear width openings. The arm sits 900mm above the roadway and is supported by 2 side support frames.

It has been designed to be installed with the minimum of ease and can secure an access point where traffic flow is low or to secure a roadway for longer periods of time.

The gate is counterweighted for ease of operation and comes with a manual locking mechanism to secure the barrier in the lowered / closed position.

GC1100CR High Impact Hinged Gate



The Avon GC1100CR High Impact Hinged Gate provides a high level of security against unauthorised vehicle access.

Designed to withstand substantial direct impact forces the gate is used to protect sites from extreme aggressive attacks. Manufactured by engineers with a wealth of experience in the fields of Hostile Vehicle Mitigation (HVM) Solutions, the GC1100CR is a highly dependable security product.

The manually operated hinged gate incorporates the crash tested vehicle restraint system (1852KJ resistance).

Shallow foundation depths are from under 470mm subject to gate design.

With an experienced system design capability along with a worldwide installation, service and maintenance capability, we are able to provide a swift and efficient solution to all your high security requirements.

Physical Dimensions:	To suit site requirements
PAS 68 Classification:	V/7500/80/90:5.7/0
Tested Model:	1.0m H x 3.8m opening
Impact Absorption:	1852KJ
Construction:	The framework is constructed from fully welded, heavy gauge, steel angle and box section and hi-tensile structural steel. The gate is constructed with up to a 4.5m opening using a heavy steel cross beam. The foundations comprise of a rebar cage set in concrete to a depth of 470mm. Side catcher assemblies are set within the rebar reinforcements with the hinged post is fixed to studs grouted into the concrete foundation.

Features

- Physically impact tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Shallow foundation less than 470mm overall depth

Benefits

- Confidence in proven performance
- Strong and durable
- Reliable and dependable
- Overcomes site depth restrictions

Please note this is a specialist high security product and is designed for use with vehicles only and a full site risk assessment must be carried out at design stage to ensure all relevant safety measures are included.

SG1100CR Armoured Vehicle Gate



The Avon SG1100CR High Impact Sliding Armoured Vehicle Gate provides a high level of security against unauthorised vehicle access.

Designed to withstand substantial direct impact forces the gate is used to protect sites from extreme aggressive attacks while maintaining a pedestrian secure environment.

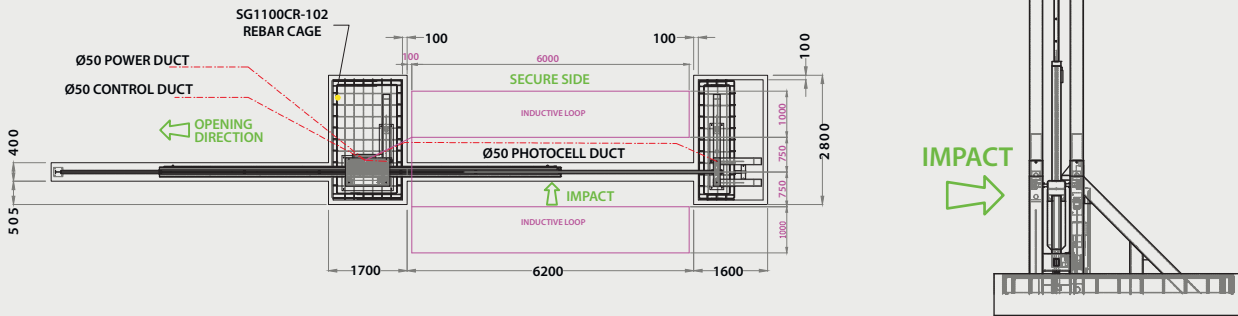
Manufactured by engineers with a wealth of experience in the fields of Hostile Vehicle Mitigation (HVM) solutions, the SG1100CR is a highly dependable security product.

The SG1100CR gate has been independently physically tested in a number of full scale crash tests conducted in accordance with PAS 68 by MIRA and the Transport Research Laboratory (TRL).

The gate is available in range of gate heights, clear widths and infill types to be provided. Foundation depths are from 500mm subject to gate design.

With an experienced system design capability along with a worldwide installation, service and maintenance capability, we are able to provide a swift and efficient solution to all your high security requirements.

SG1100CR Armoured Vehicle Gate



Physical Dimensions:	Standard gate height 2400mm - additional razor wire/cladding can be added for additional height Standard sizes - clear width openings/gap of 5m, 6m and 7m Bespoke sizes available on request, subject to conditions, contact our sales department for advice
Basic Power Requirements:	Subject to gate size and construction
Impact Absorption:	1189KJ
Full PAS 68 Classification:	V/7500(N2)/64/90:0.0/0.0
Speed of Operation:	5.7 seconds per metre (optional high speed operation 2 second per metre is available)
Tested Model:	Sliding gate with clear opening gap of 7000mm and a height of 2400mm + 1000mm sacrificial razor wire topping = total overall height of 3400mm and foundation depth of 470mm
Operating temperature range available (option):	-25°C - +70°C
Construction:	The framework is constructed from fully welded, heavy gauge, steel structures and hi-tensile structural steel.

Features

- Physically impact tested to PAS 68 criteria
- Manufactured from heavy gauge materials
- Variable height and clear widths
- Manual operating override facility
- High quality coating system (minimum galvanised)
- Shallow mounting less than 500mm overall depth
- Hold to run operation

Benefits

- Confidence in proven performance
- Strong and durable
- Flexibility to suit site requirements
- Operational under power failure conditions
- Reliable and dependable
- Overcomes site depth restrictions
- Safe operation

The gate comes with a hold to run control as standard, however it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard panic systems. Where the gate control point is remote from the installation, we strongly recommend the fitting of safety systems, recordable CCTV system and traffic lights.

Please note this is a specialist high security product and is designed for use with vehicles only and a full site risk assessment must be carried out at design stage to ensure all relevant safety systems are included.

- 2 second per metre high speed operation
- Emergency buttons with lock down
- Inductive loop detectors
- Access and intercom systems
- UPS backup for the electrical system
- Ballistic resistant cladding
- Safety edges, safety beams & obstacle scanners
- Traffic lights and back-indications systems
- Infill panels, serrated / barbed wire toppings

SG1500CR Armoured Vehicle Gate



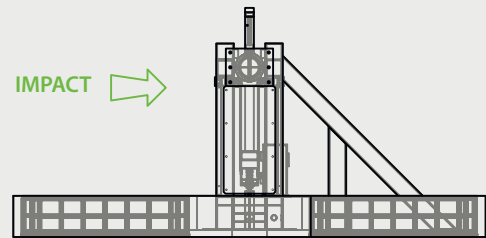
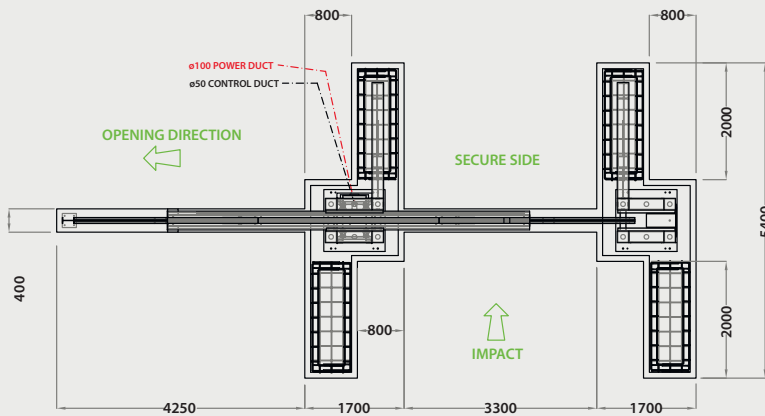
Avon SG1500CR High Impact Sliding Armoured Vehicle Gates provide a high level of security against unauthorised vehicle access.

The SG1500CR gate was first independently physically tested by the Transport Research Laboratory (TRL) using an N3 European truck in accordance with the PAS 68 specification (7,500kg weighted vehicle travelling at 80kph) and post-test achieved zero penetration. The same gate was then crash tested with a 4x4 pick-up truck travelling at 80 kph and zero penetration was achieved.

The gate design was then aesthetically enhanced by removing the front two support legs and independently tested by the Transport Research Laboratory (TRL) with a US truck (15,000lb truck at travelling at 50 mph) in accordance with the US Standard ASTM F 2656-07 (supersedes DoS SD-STD-02.01) again the gate stopped the vehicle and zero penetration was achieved.

Please note this is a specialist high security product and is designed for use with vehicles only.

SG1500CR Armoured Vehicle Gate



Physical Dimensions:	The tested model has a clear width opening of 4m, please contact our sales department for alternative dimensions
Basic Power Requirements:	Subject to gate size and construction
ASTM F2656-07 Classification:	M50 P1
Full PAS 68 Classification:	V/7500(N3)/80/90:0/0 V/2500(N1G)/80/90:0/0 (4x4 pickup truck)
Speed of Operation:	6 to 8 seconds per metre
Model Tested:	Sliding gate Overall width 6.2m 2.2m high - clear width opening of 4m
Operating temperature range available (option):	-25°C - +70°C
Construction:	The framework is constructed from fully welded, heavy gauge, steel structures and hi-tensile structural steel. Both versions of the sliding gates foundation depths are from under 500mm subject to gate design and incorporate a full impact resistant system which enables a wide range of gate heights, clear widths and infill to be provided.

Features

- Physically impact tested to PAS 68 criteria and ASTM F 2656-07 criteria
- Manufactured from heavy gauge materials
- Variable height and clear widths
- Manual operating override facility
- High quality coating system (minimum galvanised)
- Shallow mounting less than 500mm overall depth
- Hold to run operation

Benefits

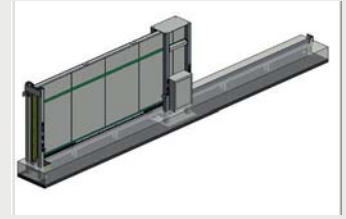
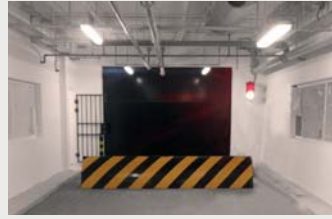
- Confidence in proven performance
- Strong and durable
- Flexibility to suit site requirements
- Operational under power failure conditions
- Reliable and dependable
- Overcomes site depth restrictions
- Safe operation

The gate comes with a hold to run control as standard, however it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard panic systems. Where the high security gates control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights and inductive loop systems.

Please note this is a specialist high security product and is designed for use with vehicles only and a full site risk assessment must be carried out at design stage to ensure all relevant safety systems are included.

- Matching infill panels
- Access and intercom systems
- Safety edges, Safety beams
- Emergency buttons with lock down
- UPS backup for the electrical system
- Traffic lights and back-indications systems
- Inductive loop detectors
- Obstacle detection scanners
- Serrated / barbed wire toppings

Garrison Ballistic Protection Gate



The Avon Ballistic Protection Gate provides a high level of ballistic protection integrated into a sliding gate to protect against unauthorised vehicle access and the threat of armed attack.

Designed & constructed to withstand a BR6 level weapon attack, the gate is used to protect sites from extreme aggressive ballistic threat while maintaining a pedestrian & vehicle secure environment.

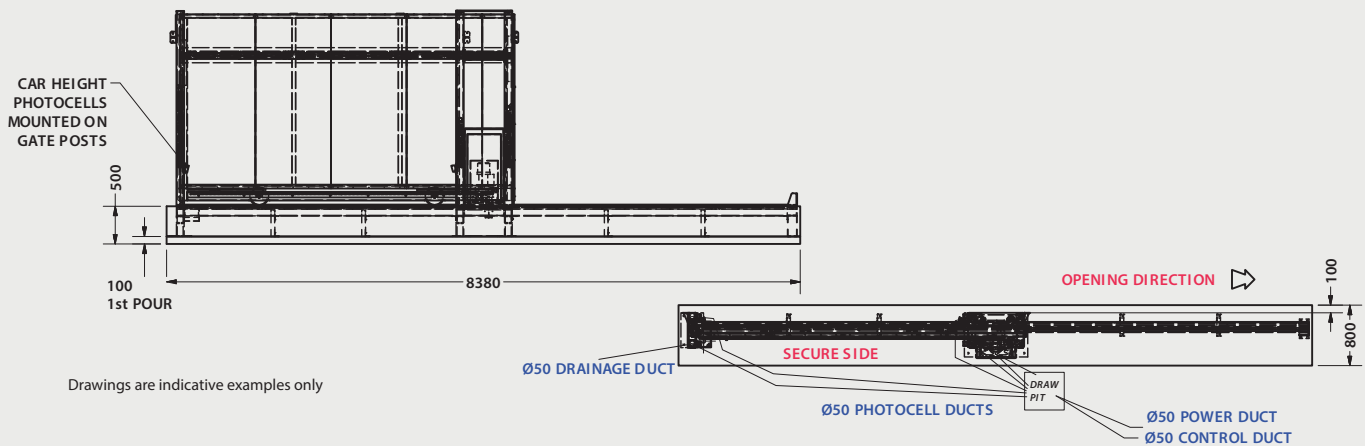
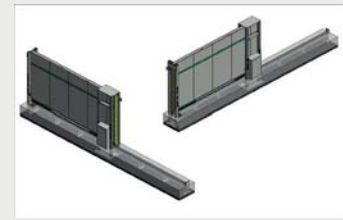
Manufactured by engineers with a wealth of experience in the fields of Hostile Vehicle Mitigation (HVM) solutions, the ballistic gate is a highly dependable security product.

The gate is constructed from material has been independently physically tested and certified to comply with the highest internationally recognised standards.

Available in range of heights, clear widths. Foundation depths are from 500mm subject to gate design.

The gate comes with a hold to run control as standard. However it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard panic systems.

Garrison Ballistic Protection Gate



Physical Dimensions:	Standard gate height 2.1m from floor level Overall gate height 2.2m (100mm is below floor level) Standard gate lengths - 4m - 10m (500mm increments) Bespoke sizes available on request, subject to conditions, contact our sales department for advice		
Basic Power Requirements:	Subject to gate size and construction		
Armour Type : BR6	Projectile calibre: 7.62 x 51 NATO	Weapon type: AK47+ 308 Winchester	Velocity range: 830 m/s
Speed of Operation:	6-8 seconds per metre (optional high speed operation 2 second per metre is available)		
Operating temperature range available (option):	-25°C - +70°C		
Construction:	The framework is constructed from steel box section, with a BR6 level ballistic protection unsecure side gate leaf with a no spall 3mm steel clad on the secure side. The gate leaf is fully encased.		

Features

- Independently tested ballistic protection material
- Multi-hit capability
- Variable height and clear widths
- Manual operating override facility
- High quality coating system
- Shallow mounting less than 500mm overall depth
- Hold to run operation

Benefits

- Confidence in proven performance
- Strong and durable
- Flexibility to suit site requirements
- Operational under power failure conditions
- Reliable and dependable
- Overcomes site depth restrictions
- Safe operation

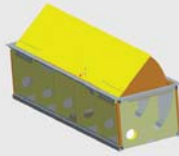
Options available

Where the gate control point is remote from the installation, we strongly recommend the fitting of safety systems including recordable CCTV system and traffic lights.

Please note this is a specialist high security product and is designed for use with vehicles only and a full site risk assessment must be carried out at design stage to ensure all relevant safety systems are included.

- 2 second per metre high speed operation
- Emergency buttons with lock down
- Inductive loop detectors
- Access and intercom systems
- UPS backup for the electrical system
- Safety edges, Safety beams & Scanners
- Traffic lights and back-indications systems
- Toppings serrated / barbed wire / electric

RB680 / 700 Road Blocker



The Avon RB680 & RB700 Road Blocker comes in a variety of widths to suit specific site requirements, with a blocking segment heights of 350mm or 700mm.

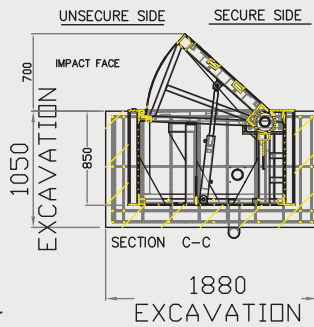
Constructed from heavy welded steel section to provide sufficient strength to exceed British axle loads. The heavy duty durbar top plate is coated with safety markings, with removable access covers to enable efficient installation and servicing.

The blocker is operated by an hydraulic ram with the power unit (HPU) positioned locally within an externally rated cabinet. The blocker mechanism is encased in a galvanised sheet steel enclosure and has access points for onward connection to ducting for hydraulic hoses and control cables.

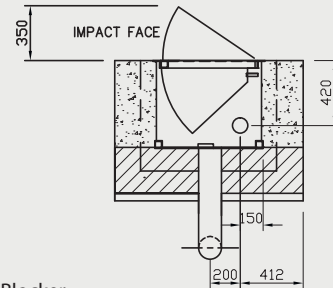
On installation the entire enclosure is encased by concrete with construction being subject to site ground conditions.

The power requirement is dependent upon the duty cycling requirement, number and size of blockers to be driven by the power pack.

RB680 / 700 Road Blocker



RB700 Road Blocker



RB680 Road Blocker

Physical Dimensions:	RB680 Road Blocker 2m - 2150mm W x 735mm D x 570mm H (350mm H raised) RB700 Road Blocker 2m - 2130mm W x 1100mm D x 1160mm H (700mm H raised)
Basic Power Requirements:	3-Phase 415vAC, 50Hz, 20 Amps (Single Phase and other voltages are available)
Control Voltage:	S.E.L.V 24v
Performance:	Loading - 20 Tonnes
Speed of Operation:	6-8 Seconds to raise or lower
Operating temperature range available (option):	-25°C - +70°C
Construction:	The supporting framework is constructed from fully welded, heavy gauge, structural steel completely encased with steel sheets to provide a self-shuttered module. Sub-surface fixing points ensure the blocker is completely secured to its foundation.

Features

- Vandal resistant
- Constructed to comply with BS6571 part 4 Grade A
- High quality coating system
- Manual hand pump facility
- 3 Phase 50Hz supply 415V

Benefits

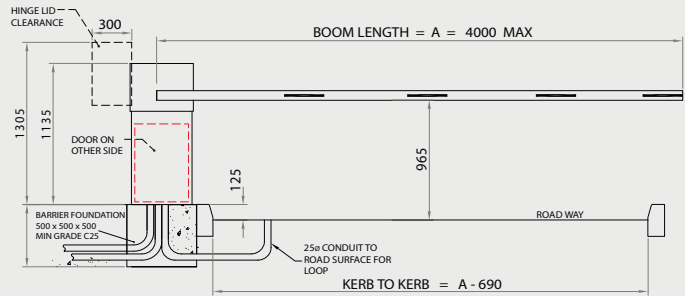
- Reliability
- Durability
- Service spares
- Ease of installation
- Manual operation in the event of power failure

The blocker comes with a push-button control as standard. However, it can be customised to interface with a wide range of access control equipment to suit specific customer requirements. Available configurations include (but are not limited to) inductive loop systems, card readers, communication equipment and manned guard emergency systems.

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a blocker controlled roadway, additional safety measures can be incorporated into the blocker system if required. Where the blocker control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system, traffic lights and safety inductive loop systems.

- Access control and intercom systems
- Emergency buttons with lock down
- UPS backup for the electrical system
- Stop / No Entry warning signs
- Accumulator systems for hydraulic operation in power failure conditions
- Inductive loop systems
- Traffic lights and back-indications systems
- Integral inset warning lights in blocking segment

EB450 Parking Barrier



The Avon EB450 Parking Barrier is an ideal automatic car park barrier for medium to high usage car parks and security control; it can easily integrate with revenue collection and access control systems.

The barrier stands 1135mm above foundation level, with the boom 840mm (to underside) above barrier cabinet foundation level. The motor plate supports the 100% duty cycle permanent capacitor 4 pole T.E.F.C. motor, which powers the sinusoidal drive mechanism via an industrial grade low ratio gearbox. Two heavy duty bearings support the drive shaft; this having 2 machined cams to activate the adjustable limit switches to control the boom travel.

The hinged/removable lockable steel top cover provides access to the drive mechanism. The cabinet houses the barrier 'parking logic' control panel, providing the necessary power supply isolator, fuses, thermal overload trips and motor contactors. An integral support is provided to maintain the aluminium boom in the horizontal position.

Physical Dimensions:	Barrier Cabinet - 305mm W x 460mm D x 1135mm H
Basic Power Req:	230v single phase, 50Hz, 6 amp (optional international voltages available)
Control Voltage:	S.E.L.V 24v
Speed of Operation:	2.4 Seconds to raise or lower
Boom Height:	965mm underside of boom to road surface (125mm kerb)
Operating temperature range available (option):	-25°C - +70°C
Approx Weight:	105kg
Construction:	The all steel cabinet and cover are shot blasted, two pack high zinc primer, 40 microns followed by a yellow (RAL1007 other options available) textured polyester powder coated top coat, 40 microns. Boom profile - Rectangular extruded aluminium 76 x 38mm white powder coated with red fascal striping.
Installation:	The barrier foundation should consist of grade C25 concrete and it is recommended that the barrier is secured to the foundation using 4 M12 x 160mm chemical anchors. The installation of ducts for cabling is dependent upon the control criteria.

Features

- ⊕ 100% duty cycling
- ⊕ Electro-mechanical drive unit
- ⊕ Fast acting 2.4 secs
- ⊕ Multi-process coating specification
- ⊕ Modular design
- ⊕ Winding handle facility
- ⊕ 230v single phase 50Hz 6A

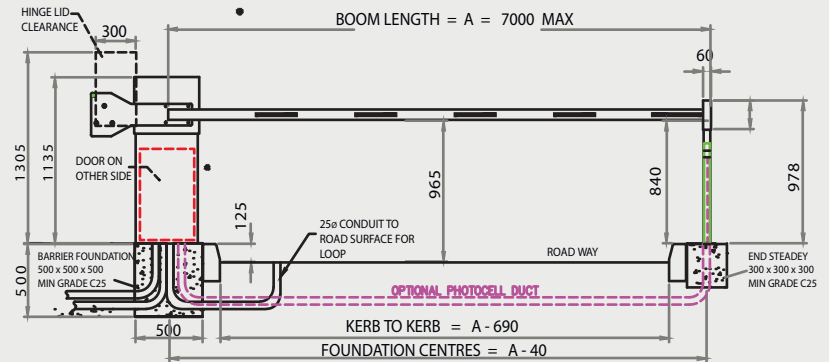
Benefits

- ⊕ Reliable
- ⊕ Low maintenance
- ⊕ High traffic flow
- ⊕ Durable
- ⊕ Service spares
- ⊕ Manual operation in event power failure
- ⊕ Ease of installation

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a barrier controlled roadway, additional safety measures can be incorporated into the barrier system if required. The barrier can be interfaced with existing or new access control systems.

- ⊕ Access control & intercom systems
- ⊕ Black / Yellow boom fascal
- ⊕ Inductive loop systems
- ⊕ Articulated Boom (up to 3m)
- ⊕ Left handed boom mounting
- ⊕ Additional safety equipment including safety buffer, photo electric cell
- ⊕ Alternative cabinet colours available
- ⊕ Boom shear facility (up to 3m)

EB750 Excel Barrier



The Avon EB750 Excel Barrier is an ideal security barrier that can be utilised as an automatic traffic barrier for car parks and security control.

The barrier can easily integrate with revenue collection and access control systems and is recommended for a wider road width or if signage, lights or drop skirts are required for the boom.

The barrier stands 1135mm above foundation level, with the boom 840mm above foundation level. The barrier's motor plate supports the 100% duty cycle permanent capacitor 4 pole T.E.F.C. motor which provides the power for the toothed belt driven industrial grade gearbox, which in turn drives the sinusoidal output mechanism. Two heavy duty bearings support the drive shaft; this having 2 machined cams to activate the adjustable limit switches to control the boom travel.

The hinged lockable steel top cover provides access to the drive mechanism. The cabinet houses the control panel, providing the necessary power supply isolator, fuses, thermal overload trips and motor contactors. For boom lengths greater than 5m a straining wire is added for additional stability, along with an adjustable spring loaded end steady/pogo support to suit, recommended when equipment is added to the boom.

Physical Dimensions :	Barrier Cabinet - 305mm W x 460mm D x 1135mm
Basic Power Req:	230v single phase, 50Hz, 6 amp (optional international voltages available)
Control Voltage:	S.E.L.V 24v
Speed of operation:	4.2 seconds to raise or lower
Boom height:	965mm underside of boom to road surface (125mm Kerb)
Operating temperature range available (option):	-25°C - +70°C
Approx weight:	130kg
Construction:	The all steel cabinet and cover are shot blasted, two pack high zinc primer, 40 microns followed by a yellow (RAL1007 other options available) textured polyester powder coated top coat, 40 microns. Boom profile - Rectangular extruded aluminium 76 x 38mm white powder coated with red fascal striping Max length 7m. Booms are mounted on the right hand as standard unless specified.
Installation:	The barrier foundation should consist of grade C25 concrete and it is recommended that the barrier is secured to the foundation using 4 M12 x 160mm chemical anchors. The installation of ducts for cabling is dependent upon the control criteria.

Features

- 100% duty cycling
- Electro-mechanical drive unit
- Fast acting 4.2 sec
- Multi- process coating specification
- Modular design
- Winding handle facility
- 230v single phase 50Hz 6A

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a barrier controlled roadway, additional safety measures can be incorporated into the barrier system if required. The barrier can be interfaced with existing or new access control systems.

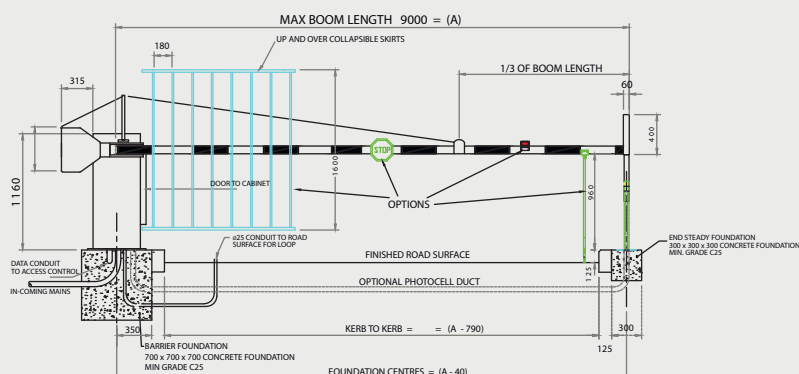
- Access control & intercom systems
- Boom lights
- Alternative cabinet colours available
- Skirts underslung
- Black / Yellow boom fascal
- Left handed boom mounting
- Additional safety equipment including safety buffer, photo electric cell

Benefits

- Reliability
- Low maintenance
- Service spares
- Manual operation in the event of power failure
- Ease of installation

- Inductive loop systems
- Boom shear facility (up to 3m)
- Boom mounted STOP / NO Entry signs

EB950 Triumph Security Barrier



The Avon EB950 Triumph Barrier is ideal for industrial car parks and security control; it can easily integrate with access control systems and is recommended for a wider road width or if signage, lights or skirts are required for the boom.

The barrier stands 1160mm above foundation level with the boom 960mm above foundation level. The high duty cycling 24vdc linear actuator connects to the drive shaft via a torsion arm providing an operating speed of approximately 10 seconds. An industrial grade gas strut is used to provide additional counterbalancing and dampening thus giving a smooth operation.

The steel cabinet is shot blasted, primed and powder coated (RAL1007) and houses the control panel, linear actuator with manual winding facility and the limit switches.

Barriers with booms in excess of 5m or where collapsible skirts are fitted require end supports to aid boom rigidity.

Physical Dimensions :	Barrier cabinet 410mm W x 560mm D x 1160mm H
Basic Power Req:	230v single phase, 50Hz 6 amp
Control Voltage:	S.E.L.V 24v
Speed of Operation:	10 seconds to raise or lower
Boom Height:	1085mm underside of boom to road surface (125mm kerb)
Operating temperature range available (option):	-25°C - +70°C
Approx Weight:	185 kg
Construction:	The all steel cabinet and cover are shot blasted, two pack high zinc primer, 40 microns followed by a yellow (RAL1007 other options available) textured polyester powder coated top coat, 40 microns. Barriers boom profile: The GRP (glass reinforced polymer) booms are circular section 82mm in diameter and supplied white with red bands, Max Length 9m.
Installation:	The barrier foundation should consist of grade C25 concrete and it is recommended that the barrier is secured to the foundation using 4 nos M16 x 190mm chemical anchors. The installation of ducts for cabling is dependent upon the control criteria.

Features

- High duty cycling
- Electro mechanical linear actuator
- Fast acting
- Multi-process coating specification
- Modular design
- Winding handle facility
- 230v single phase 50Hz 6A

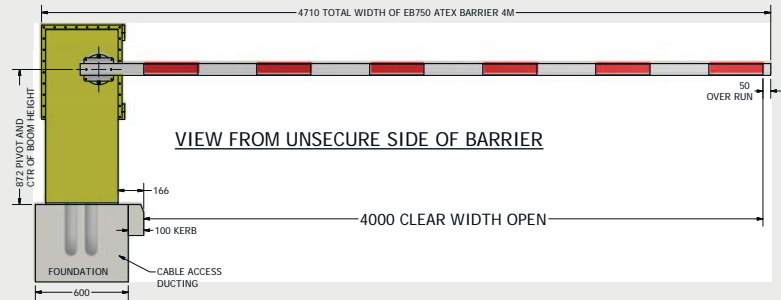
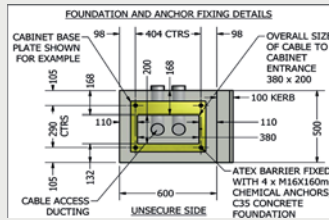
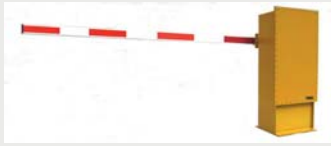
Benefits

- Reliability
- Low maintenance
- Service spares
- Manual operation in the event of power failure
- Ease of installation

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a barrier controlled roadway, additional safety measures can be incorporated into the barrier system if required. The barrier can be interfaced with existing or new access control systems.

- Access control & intercom systems
- Black / Yellow boom fascial
- Inductive loop systems
- Boom lights
- Boom mounted STOP/ No Entry Signs
- Additional safety equipment including safety buffer, photo electric cell
- Alternative cabinet colours available
- Skirts underslung / full height

Avon ATEX CAT3 Barrier



The Avon ATEX CAT3 Barrier is a rising arm vehicle control barrier designed to operate in the oil & gas, petrochemical, pharmaceuticals, chemicals & fertilizer industries. The barrier cabinet is categorised as an ATEX flameproof EX d enclosure and is certified to ATEX Group 2 Category 3.

The barrier is able to operate in hazardous environments or potentially explosive atmospheres: the working components are housed in a flameproof enclosure designed to withstand the pressure developed during an internal explosion and prevent the transmission of the explosion to the explosive gas atmosphere surrounding the enclosure.

Physical Dimensions :	Barrier Cabinet - 360mm W x 468mm D x 1160mm
Basic Power Req:	230v single phase, 50Hz, 6 amp (optional international voltages available)
Control Voltage:	S.E.L.V 24v
Speed of operation:	4.2 seconds to raise or lower
Boom height:	834mm above foundations level
Operating temperature range available (option):	-25°C - +70°C
Approx weight:	155kg
Construction:	The cabinet body is constructed from mild steel which has been shot blasted, applied with an anti-corrosive surface treatment and finished in RAL1007 powder coat as standard. (other options available) Boom profile - Rectangular extruded aluminium 76 x 38mm white powder coated with red fascal striping (black and yellow option available) Max length 5m. Booms are mounted on the right hand as standard unless specified.
Installation:	The barrier foundation should consist of grade C35 concrete and it is recommended that the barrier is secured to the foundation using 4 M16 x 160mm chemical anchors. The installation of ducts for cabling is dependent upon the control criteria.

Features

- Physically tested to conform to BS EN 60079-1:2007
- ATEX Group 2 category 3 compliant
- Manufactured from heavy gauge materials
- External power isolator
- Electro-mechanical drive unit
- Manual operating override facility
- 100% duty cycling

Benefits

- Proven performance
- Confidence
- Strong & Durable
- Manual operation in the event of power failure
- Ease of installation

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a barrier controlled roadway, additional safety measures can be incorporated into the barrier system if required. The barrier can be interfaced with existing or new access control systems.

- Access control & intercom systems
- Black / Yellow boom fascal
- Inductive loop systems
- Alternative cabinet colours available
- Left handed boom mounting
- Boom shear facility (up to 3m)

EX750 CAT2 Barrier



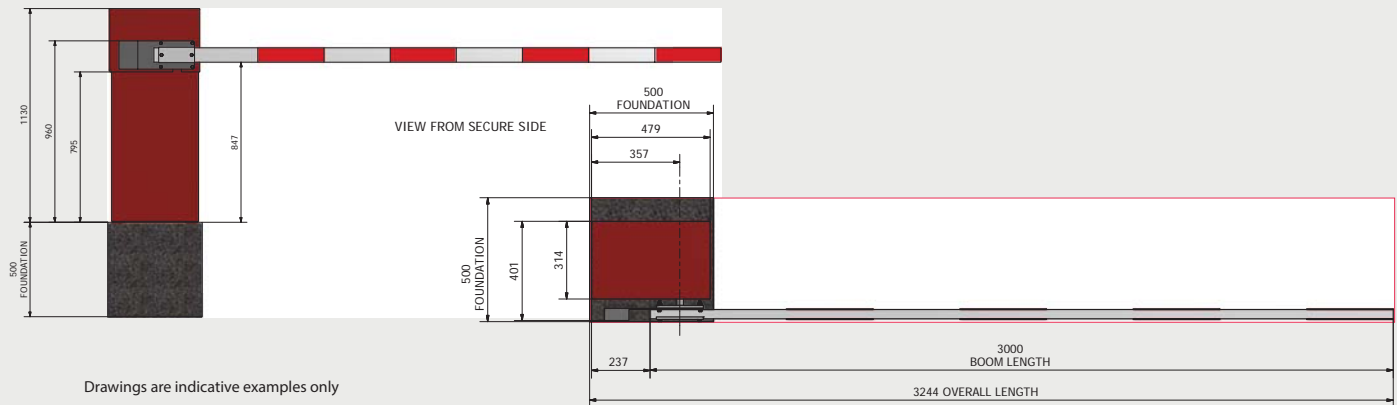
The Avon EX750 CAT2 Barrier is a rising arm vehicle control barrier designed to operate in hazardous areas for example the oil & gas, petrochemical, pharmaceuticals, chemicals & fertilizer industries.

The vehicle control barrier is ATEX & IECEx certified as a Group 2 Category 2 product enabling it to operate in environments classified as hazardous Zone 2 & Zone 1 areas.

The barrier cabinet stands at 1130mm above foundation level with the boom in its closed horizontal position 834mm above foundation level. The boom is available in lengths up to 3M, 4M & 5M (500mm increments) and finished in red/white fascal as standard, the cabinet is finished in red (RAL 3001) as standard, however other options are available.

With an experienced system design capability along with a worldwide installation, service and maintenance capability, we are able to provide a swift and efficient solution to all your security & vehicle control requirements.

EX750 CAT2 Barrier



Physical Dimensions:	Barrier Cabinet - 1130mm H x 500mm W x 305mm D
Basic Power Requirements:	230V 50Hz / 60Hz single phase. 6A electrical supply
Control Voltage:	S.E.L.V 24v
ATEX Protection:	II 2G IIB c T3
IECEx Protection:	Ex h IIB T3 Gb
Speed of operation:	4.2 seconds to raise/lower cycle
Boom height:	834mm above foundation level
Operating temperature range available (option):	-20°C - +50°C
Approx weight:	130kg
Construction:	The cabinet body is constructed from mild steel and is finished with an anti-static powder coating as standard RAL3001 powder coat as standard. (other colour options available) The cabinet comprises of a fixed base and a hinged top lid. The lid provides easy access to the drive assembly and is secured via the lockable cabinet door. Boom profile - Rectangular extruded aluminium 76 x 38mm white powder coated with red fascal striping (black and yellow option available) Max length 5m. Booms are mounted on the right hand (as standard unless specified)
Installation:	The barrier foundation should consist of grade C25 concrete and it is recommended that the barrier is secured to the foundation using 4 M12 x 160mm chemical anchors. The installation of ducts for cabling is dependent upon the control criteria.

Features

- ATEX & IECEx group II Category 2 compliant
- Certified for use up to Zone 1
- Electromechanical drive unit
- Manual operating override facility
- 100% duty cycling

For safety reasons pedestrians, cyclists and motorcycles are advised not to use a barrier controlled roadway, additional safety measures can be incorporated into the barrier system if required.

Options available

Where the barrier control point is remote from the installation, we strongly recommend the fitting of safety systems including recordable CCTV system and traffic lights.

Please note this is a specialist security product and is designed for use with vehicles only and a full site risk assessment must be carried out at design stage to ensure all relevant safety systems are included.

Benefits

- Proven performance
- Confidence
- Strong & Durable
- Manual operation in the event of power failure
- Reliable

Gates



Avon Cantilever Sliding Gates are automatic sliding gates that come in variety of widths and heights to suit site requirements. The automatic cantilever sliding gates are manufactured from RHS sections of sufficient strength to suit operating requirements which are dependent upon the gates opening width, height, type of infill (windloading /weight) and the level of security required.

The automatic cantilever sliding gates can span openings of six metres (single leaf) or up to 10 metres (double leaf), subject to gate height and infill.

The sliding gates have 2 sets of guide posts with tension wheels to hold the leaf in the vertical position and are driven by a rack and pinion system. Cantilever Sliding Gates require no track or support across the roadway. The gates leaf is supported by a cantilever support carriage. The Gates have been designed to withstand high flows of traffic and varying environmental conditions. A variety of sizes infills and finishes are available to suit individual site applications.

The Avon Groundtrack Sliding Gate provides an identical level of security to the cantilever gate but requires a shorter run back area making it possible for installation in restricted space/areas. It is an ideal security solution when restricting access to a wider road width.

The gate leaf is held in the vertical plane by a set of guide posts with adjustable guide rollers and driven by a rack and pinion. All drive units mechanically lock the leaves in position with the option for a positive locking mechanism.

It has been designed to withstand high flows of traffic and varying environmental conditions. A variety of sizes, infills and finishes are available to suit individual site applications.



The Avon Hinged Gate provides a secure and robust means of vehicle and pedestrian access control for wider road widths. The gate can span openings of six metres (single leaf) or up to 10 metres (double leaf), subjects to height and infill. The hinged gates are post mounted via adjustable hinges with grease points to ease operation.

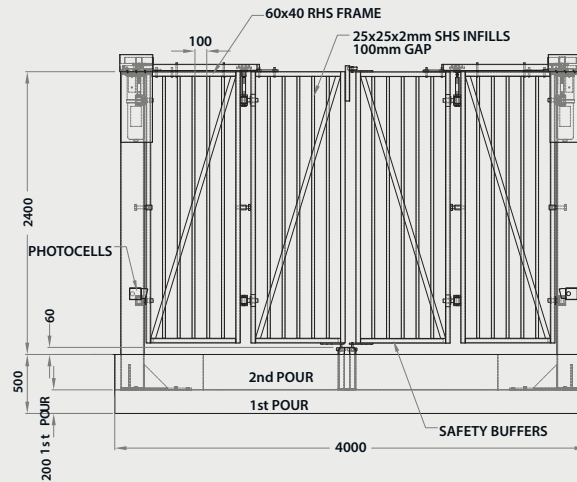
They have a leaf mounted drive arm or alternatively a sub-surface drive unit, should the environment require an aesthetically acceptable option.



The Avon FG250 Fast Gate is a speed gate that provides a security against unauthorised vehicle and pedestrian access. A fast acting bi-folding speed gate designed for durability with its 100% duty cycle ensuring reliability and swift opening and closure.

The speed gate is trackless making it easy to install with minimum foundation requirements as no ground track is required. The Fast Gate has double bi-folding leaves that can secure a road width of up to 4m (wider roadways can be accommodated but may need a ground track), this makes it an ideal choice for both Public and Commercial Security Control Points. The Electro/mechanical drive unit is discreetly housed giving a clean and clutter-free installation.

Gates



Example of Fast Gate only
contact sales dept for alternative
sizes.

TECHNICAL DETAILS

Power requirements:
230v, Single phase 50Hz 10amp Supply
230v/400v 3 phase option (110v option on request)

Gate infill:
Vertical bar: RHS & CHS
Welded mesh
Sheet clad
Corrugated palisade

Security topping:
Barbed/Razor Wire
Serrated top
Spikes

Features

- High quality coating system
- Individually designed units
- Manual override facility
- 230V single phase 50Hz 10A

Benefits

- Environmentally durable
- Custom built to client specification
- Flexibility to suit site requirements
- Operational during power failure conditions
- Ease of installation

Options- In accordance with the workplace (Health, Safety and Welfare) Regulations 1992, BS EN 12453:2001 and BS EN 12445:2001 it is highly recommended that the following items are fitted to your gate.

- Safety Edge to leading edge of gateleaf - to prevent the gate closing on a person or vehicle in the event it is activated
- Additional safety edges to internal and external motor posts
- Weldmesh infill
- Gate post mounted audible alarm or flashing beacon
- Pedestrian guard rail around run-back area. This is to prevent injury to a person, should they stray into that area whilst the gate is operating
- Safety induction loops cut into the road surface. This will inhibit the gate closing on to a vehicle within the aperture, if detected
- Safety photocells. Act as additional safety for pedestrians and high lorries.

- Traffic lights & back-indication systems
- Inductive loop systems
- Audible alarm
- Safety edge
- Indicator lights

- Safety photocells
- Flashing beacons
- Pedestrian guard rail
- Matching infills & cladding
- Serrated / Barbed wire toppings

Turnstiles



Avon Turnstile Systems are ideal for securing pedestrian entrance ways against unauthorised access.

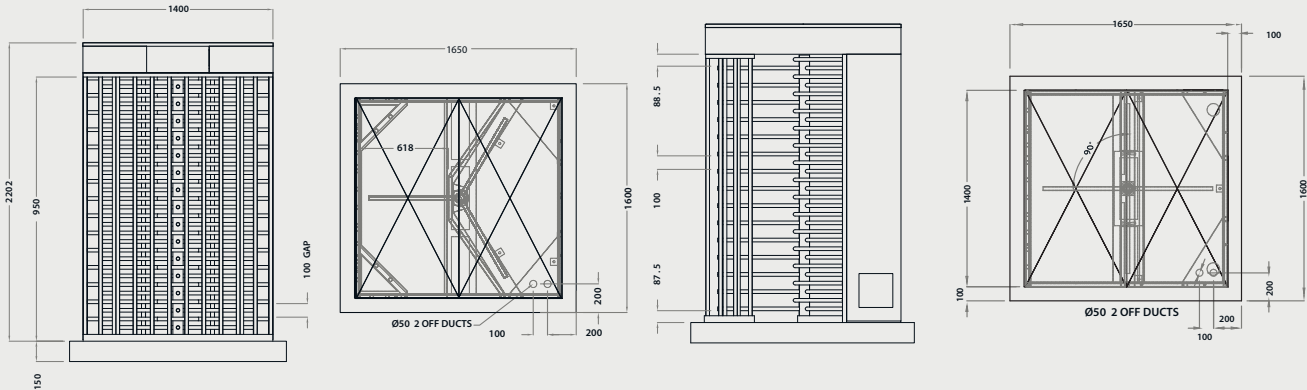
Designed and manufactured in the UK, Avon Turnstiles will provide additional security and enhance any unguarded pedestrian entrance to a site.

Available in a range of designs and operating modes they can be interfaced with all forms of access control.

Turnstile systems are manufactured as standard from steel sections and sheets which are fully galvanized, however a variety of finishes are available as options including powder coated to customer specification or stainless steel.

The full-height turnstile is constructed from steel framed panels with a combination of sheet and bar infill. The sections are modular in design giving ease of installation.

Turnstiles



Turnstile Types:	4 arm - 90° version 3 arm - 120° version
Control Mechanisms:	Free wheel, single direction only controlled access, single/dual direction
Power Requirement:	230v Single Phase 50 HZ 30amps
Rotor Options:	Tubular or hooped bars
Standard Height:	2.2m

Features

- High quality coating system
- Robust construction
- Rotor options 90/120°
- Modular construction

Options available

The turnstile comes with a push-button control as standard, however it can be customised to interface with a wide range of access control equipment to suit specific customer requirements (available as options) and any configuration including (but not limited to) card readers, and communication equipment.

Where the turnstile control point is remote from the installation, we strongly recommend the fitting of a recordable CCTV system.

- Access control and intercom systems
- Access control mounting plates
- Canopy with / without down lights
- Adjacent disabled access gate
- Battery backup facility

Benefits

- Low maintenance
- Reliable and dependable
- Secure
- Ease of installation

- Power failure - lock/free wheel
- Anti climb topping
- Indicator lights
- Guide railings
- Stainless steel / painted

Avon Barrier Support



Avon Barrier's significant experience in the perimeter security market, make them an ideal partner to work with and are proficient in all aspects of project implementation from concept system design through equipment design / manufacture to installation and maintenance support.

Avon Barrier has a clear aim to provide a complete solution to their clients security needs by developing long term relationships it can advise and design solutions to the ever increasing burden of security.

Our network of offices and approved installers worldwide enables us to offer global operational support on a more local basis.

Avon Barrier Support



Consultancy/Design

- Advice
- Solutions
- Expertise
- Site Surveys
- Manufacturing
- Product Development
- Partnerships
- Bespoke Designs

Project Management

- Client Partnership
- Estimating
- Progress Reports
- Quality
- Site Preparation
- Civil Works
- Installation
- Commissioning

Technical Support

- Worldwide Technical Support Engineers
- On-line Drawings & Manuals
- Training
- Fault Diagnosis
- Telephone and on-line support

After Sales Care

- Worldwide First Line Service Engineers
- Extended Warranty
- Service Response & Maintenance Contracts
- Spares & Parts Department

Preventative Maintenance Plans

Buying a system from Avon Barrier automatically offers you a 12 months part warranty.

Onsite maintenance and breakdown call outs can be covered under a preventative maintenance plan.

All of Avon Barrier's products will require routine maintenance to maximize life expectancy and prevent premature wear.

(NB the equipment warranty is subject to evidence of maintenance in accordance with equipment O&M Manual).

ABC

Avon Barrier

“Determined Solutions to Determined Threats”

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