



Road Blockers & Rising Kerbs

PAS 68 & Security Ranges



Product Brochures



FP2
Security Sliding Gates



FP2.1
Barricade Beams



FP3
Hinged/Swing Security Gates



FP4
Automatic Drop/Rising Arm Barriers



FP5
Road Blockers & Rising Kerbs



FP5.1
Rising & Static Bollards



FP6
Manual Perimeter Security



FP7
Pedestrian Gates & Turnstiles

Also available:

[Corporate Brochure](#)

[Your Guide to PAS 68](#)

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Why Use Frontier Pitts?



From our UK HQ
in Crawley, West Sussex



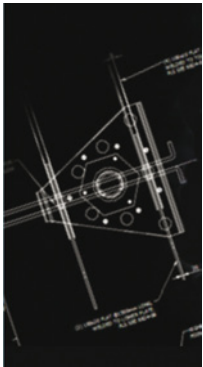
Frontier Pitts is more than just a Manufacturer:

90 years experience & accredited to BSi ISO 9001

National & International. Installations in over 90 countries

95 directly employed personnel, including multi-lingual staff
& personnel that have been Frontier Pitts for 30+ years

Technical Consultants based at regional offices will visit
any site within the British Isles, without charge or obligation,
offering technical advice on the most appropriate & effective
perimeter security solutions. Including BSi PAS 68 & CEN CWA
16221 standards.



Directly employed sales & support staff

Large product portfolio to suit all budgets & requirements

Standard product specifications are complimented by our
bespoke design service. Previous accomplishments include a
sliding gate system which secures a 70 metre aperture



Full 3D CAD Design. Site specific drawings issued to clients

British Engineering - Designed & built to last

Mechanical & Electrical Engineering Research & Development
Programs



Comprehensive Training Program; ensures the client always
receives the very best of our technical expertise

Dedicated Project Manager for each project. All work is
executed under the strict control of our specially trained PMs

Fleet of vehicles including HGV's to ensure the equipment is
safely delivered to site, with full ID tracking for security





Accreditations



Secured by Design



Highly skilled, dedicated Mechanical & Electrical Field Engineers

Installation, Commissioning, Service & Maintenance

24hr / 7days a week manned UK Call Centre &
Nationwide Breakdown Service

A range of Maintenance Contracts available to suit individual
site requirements

Maintenance Contracts with response times in as little as 4 hours
Comprehensive Customer Service

Highly skilled, directly employed engineers located nationally.
Frontier Pitts do not use Sub Contractors

Full Installation & Commissioning Service

Civil, Electrical & Ground Works Team

BSi ISO 9001 Accredited and LPCB approved to LPS 1175

Verified and Founder member of the PSSA - Perimeter Security
Suppliers Association - with the aim to raise the standards of the
industry.

In house resources & skills - IT, Engineering, Fabricating,
Maintenance & Installation - to overcome any possible obstacle

Spares Department, holding on average £200K of stock

Frontier Pitts is highly recommended by our existing & previous
customers

Extra Fast Repair & Refurbishment for existing customers.

Total customer care for your peace of mind

In house secure IT servers, latest software and hardware

Experience of 'List X' regulations and data security.

Road Blockers and Rising Kerbs are designed to offer an impact-resistant barrier to vehicle access and are well suited to 'High Security' sites. Such installations may range from car parks through to anti-terrorist protection of defence sites. Whether the requirement is for a simple, low cost rising kerb for relatively low volume usage or a heavy-duty, anti-terrorist PAS 68 rated HVM (Hostile Vehicle Mitigation) roadblocker for frequent operation, Frontier Pitts will supply a system designed to meet the individual sites exact needs. There are various options to consider when specifying your roadblocker/rising kerb system, including:-

1. Which product range? PAS 68 Impact Tested HVM Anti Terra Range or Security Range
2. Width of road that requires road blocker/rising kerb
3. Other accessory requirements; including location of the control cabinet
4. Conditions on site (weather; usage, etc)

Frontier Pitts manufacture a wide range of hydraulically operated road blockers and rising kerbs to suit individual site requirements.

Our 'Parking Height with SMT' (Surface Mount Technology) Rising Kerb, which has a lift height of 300mm and comes in widths up to 3000mm. Power is supplied from a three phase supply as standard, however single phase 230V supply is possible.

Our 'Security Height' Road Blocker can be manufactured in lift height options of 353mm and 533mm. Available in widths up to 5m. The Security Height Road Blocker is recommended for sites requiring a greater level of security without the PAS 68 rating. Power is supplied from a three phase supply.

Road Blockers & Rising Kerbs have a 100% duty rating; they will generally operate an unlimited number of cycles per hour. Allows rapid traffic flow with adjustable operating times of 3-4 seconds.

The Road Blocker gives added security where vandalism is a risk.

The Road Blocker Top Plate is fully coated with an anti skid resistant treatment which has been fully tested under laboratory conditions for at least 12 months.



'Parking Height with SMT' Rising Kerb. Lift height of 300mm



'Security' Height Road Blocker with a lift height of 353mm

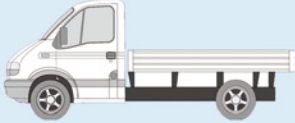
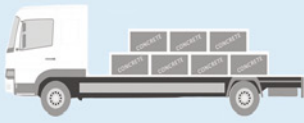


'Security' Height Road Blocker with a lift height of 533mm

Terra Blocker, Terra Shallow Blocker & Terra Surface Mount Blocker



The Anti Terra range includes equipment successfully impact tested to the BSi PAS 68 specification. The different category ratings are all designed to illustrate how the perimeter security equipment will arrest an energy created by various masses and speeds, as illustrated below:

Vehicle & Vehicle Mass				
M1	N1	N2	N3	
				
1500kg	3500kg	7500kg laden	7500kg empty 18000kg	
Speeds	30mph / 48kph	40mph / 64kph	50mph / 80kph	

When specifying your PAS 68 equipment, first establish what speed the different types of vehicles could reach on site before approaching the barrier & therefore how much energy the barrier may need to stop.

For further information please see Frontier Pitts “Your Guide to PAS 68” or contact the PAS 68 Specialist Technical Consultant on 01293 422800



Terra Surface Mount Blocker
7500kg (N3) @ 50mph
1852kj



Terra Shallow Blocker
7500kg (N3) @ 50mph
1852kj



Terra Blocker
7500kg (N3) @ 50mph - 1852kj
7500kg (N2) @ 30mph - 667kj
6800kg @ 80kph (K12)

Vehicle Test Weight (kg)	Vehicle Class	Vehicle Speed (kph)	Vehicle Angle	Vehicle Penetration	Dispersion
Terra Surface Mount Blocker					
7500kg	N3	80	90	0.0	7.6
Terra Shallow Blocker					
7500kg	N3	80	90	0.0	25.0
Terra Blocker					
7500kg	N3	80	90	4.0	25.0
7500kg	N3	80	90	0.0	0.0



Parking Height Rising Kerb with SMT Surface Mount Technology

Lift Height of 300mm
Width Up to 3 metres



Special Stainless Steel Parking Height Rising Kerbs with yellow & black chevron paint finish installed at an elite inner city residence



Special Parking Height RoadBlockers installed in front of a vehicle lift of an elite inner city residence

The Parking Height Rising Kerb with SMT (Surface Mount Technology) is a surface mounted unit requiring minimal foundations, which has a lift height of 300mm and widths up to 3000mm.

Provides a simple solution and added security to sites where vandalism is a risk

Typical operating speeds of 3-6 seconds* depending on configuration and width.

100% duty rating - designed for continuous and frequent use. Power is supplied from a three phase 400V power supply as standard, however single phase 230V supply is possible.

Recommended that the rising kerb's control cabinet is installed within 10metres of the unit.

Accessories Included: Traffic Control Light system. Highly recommended with all rising kerbs.

Accessories Optional: Signage, blocker lights & vandal resistant light cages. Please see page 18.

Access controls: A wide range of access control systems are available. Please see page 20.

Safety control systems: Vehicle detector loops, safety photocells and ultra-sonic sensors are available. Please see page 20.

**This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453*

Applications: Anti ram security without the
PAS 68 specification

Banks | Depots | Cargo Parks | Ports | Airports |
Car Park | Traffic Control | Local Authority Buildings
Industrial & Commercial Premises



Features

- Industrial hydraulic pump drive unit
- Motor protection
- Security lock on cabinet door
- Instantly Reversible
- Bulb failure sensor for traffic lights
- Industrial bulbs
- Override Switch
- Switched fused supply
- Mains indicator lamp
- Reinforced hoses for long service life
- Long life hydraulic seals



CIVIL REQUIREMENTS

Parking Height with SMT Rising Kerb Foundation
Total Width: Blocker Width + 200mm x
L:3790mm x D:150mm
(Note: Power and control wiring ducts
to be incorporated into foundations)

Control Cabinet Foundation
800mm SQ. x 300mm deep

ELECTRICAL REQUIREMENTS

10 amp, 5 wire, 400V, 50Hz - three phase
& neutral (single phase supply possible).



Security Height Road Blocker

Lift Height options of 353mm or 533mm
Width Up to 5 metres



353mm lift Road Blocker



533mm lift Road Blocker



The Security Height Road Blockers has lift height options of 353mm & 533mm, and is manufactured in widths up to 5m.

Road Blockers provide higher levels of security with built in stopping power, and are used extensively for premises such as banks, embassies, bullion depots, cargo parks, ports and lorry parks.

Typical operating speeds of 3-6 seconds* depending on configuration and width.

100% duty rating - designed for continuous and frequent use. Power is supplied from a three phase 400V power supply as standard.

Recommended that the road blocker's control cabinet is installed within 10metres of the unit.

Accessories Included: Traffic Control Light system. Highly recommended with all rising kerbs.

Accessories Optional: Signage, blocker lights & vandal resistant light cages. Please see page 18

Access controls: A wide range of access control systems are available. Please see page 20.

Safety control systems: Vehicle detector loops, safety photocells and ultra-sonic sensors are available. Please see page 20.

**This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453*

Applications: Anti ram security without the
PAS 68 specification

Banks | Depots | Cargo Parks | Ports | Airports | Car Park |
Traffic Control | Local Authority Buildings
Industrial & Commercial Premises



Road Blocker with inner lights

Features

- Industrial hydraulic pump drive unit
- Motor protection
- Security lock on cabinet door
- Instantly Reversible
- Bulb failure sensor for traffic lights
- Industrial bulbs
- Override Switch
- Switched fused supply
- Mains indicator lamp
- Reinforced hoses for long service life
- Long life hydraulic seals



CIVIL REQUIREMENTS

353mm lift Security Height Road Blocker Foundation
Total Width: Blocker Width + 200mm x L:3790mm x D:150mm

533mm lift Security Height Road Blocker Foundation
Total Width = Blocker Width + 630mm x L:800mm x D:465mm

(Note: Power and control wiring ducts to be incorporated into foundations)

Control Cabinet Foundation - 800mm SQ. x 300mm deep

ELECTRICAL REQUIREMENTS

10 amp, 5 wire, 400V, 50Hz - three phase & neutral (single phase supply possible).

The Award Winning PAS 68 Road Blocker from Frontier Pitts.

The ONLY surface mounted blocker to be successfully impact tested to the BSi PAS 68 standard with zero penetration AND remain bolted in its original position during and after impact.



PAS 68 Terra Surface Mount Blocker

V Road Blocker 7500[N3]/80/90:0.0/7.6

*Tested dimensions : width 2500mm,
lift height 1100mm
maximum width 4000mm*



Successfully impact tested to the latest PAS 68:2010 specification stopping a 7500kg vehicle travelling at 50mph (80kph) which equates to 1852kj. Maximum width 4000mm. Surface Mounted.

The unit is mounted on the road surface, therefore no foundations are required. The special pre formed ramps allow safe passage by all vehicles. The tarmac covering provides an anti slip surface for cyclists. Flush mount installation also available.

Hydraulically driven. Designed for ease of installation and maintenance. The Terra Surface Mount Blocker can be interfaced to any access control systems.

BENEFITS & FEATURES

Impact tested to the latest BSi PAS 68:2010 specification- resulting in zero penetration

Road surface blocker - no foundations required. Ideal for inner city sites

Can also be installed flush with ground - foundation depths of only 220mm required.

Hydraulically operated 400V

100% duty rating

Instantly reversible

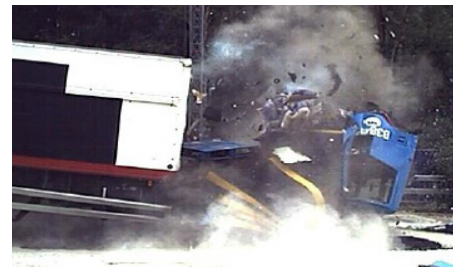
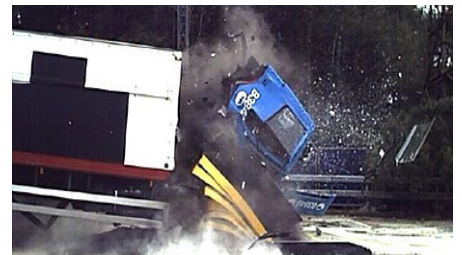
Width up to 4 metres (securing apertures of 5.8m)

Concertina safety skirt to prevent potential trapping areas.

Wide range of Accessories available.

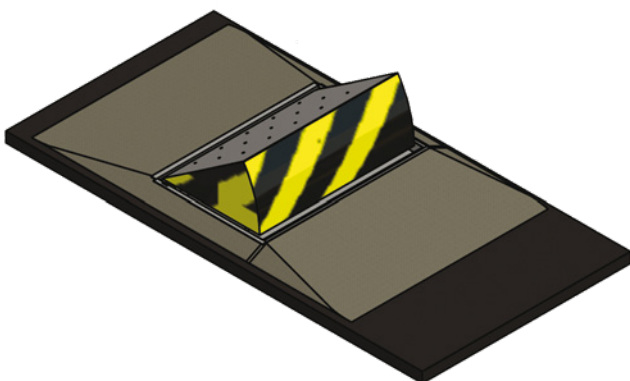
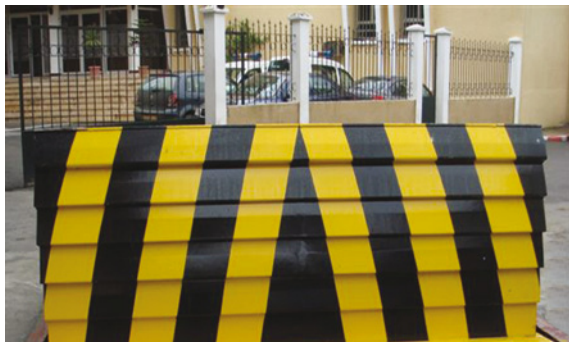
Control cabinet recommended to be installed within 10 metres of unit.

Further bespoke systems available.



Applications: Inner city locations with limited foundation depths that require equipment with a higher level of PAS 68 rating

High Security | Anti Terrorist | Government Institutions | Military Bases | Airports



In event of Power Failure

Fail safe (remain in raised position)

Fail secure (remain in lowered position)

Option of an automatic Accumulator or manual hand pump is available if the blocker is to be re-raised during power failure.

DUTY CYCLE – 100%

OPERATING SPEED

Typical speeds of 4-6 seconds* depending on configuration. EFO (extra fast operation) in up to 1 second.

OPTIONAL ACCESSORIES - Please see page 18

Accumulator – allows a number of operations in power failure mode

EFO (Extra Fast Operation)

100/200mm Traffic Light System

Manual Hand pump

High Security Cabinet

SAFETY - Option of vehicle detector loops and safety photocell beams

CIVIL REQUIREMENTS

Minimum depth of 150mm

(Note: Power and control wiring ducts may be required).

Control Cabinet Foundation

L:600mm x W:900mm x D:300mm

ELECTRICAL REQUIREMENTS POWER

Three Phase Supply

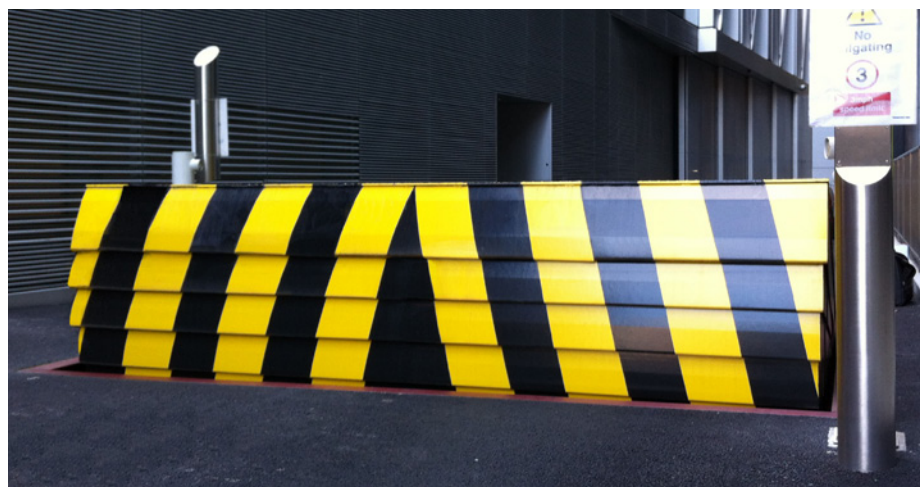
**This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453*



PAS 68 Terra Shallow Blocker

V Road Blocker 7500[N3]/80/90:0.0/25

*Tested dimensions : width 2500mm,
lift height 1100mm
maximum width: 4000mm*



Successfully impact tested to the latest BSi PAS 68:2010 specification stopping a 7500kg vehicle travelling at 50mph (80kph) which equates to 1852kJ. Maximum width 4000mm, maximum foundation depth required 400mm.

To the amazement of the Security Consultants & Civil Engineers that witnessed the successful PAS 68 impact test, the unit had been installed just 52 hours before impact.

Hydraulically driven. Designed for ease of installation and maintenance. The Terra Shallow Blocker can be interfaced to any access control systems. The top plate's anti skid resistant coating allows safe passage for cyclists.

BENEFITS & FEATURES

Shallow foundation depths of only 400mm required.

Hydraulically operated, 400V

100% duty rating

Instantly reversible

Width up to 4 metres (securing 5.8m apertures)

Impact tested to the latest BSi PAS 68:2010 specification

Concertina Skirt to prevent potential trapping areas.

Wide range of Accessories available.

Control cabinet recommended to be installed within 10 metres of blocker

Top plate is coated in anti skid resistant treatment



Official Police Security Initiative

Applications: Inner city locations with limited foundation depths that require equipment with a higher level of PAS 68 rating

High Security | Anti Terrorist | Government Institutions | Military Bases | Airports



Terra Shallow Blocker post impact



During manufacture; illustration of the depth.

In event of Power Failure

Fail safe (opens to the lowered position)

Fail secure (remains in the raised position)

Option of an automatic Accumulator or manual hand pump is available if the blocker is to be re-raised during power failure.

DUTY CYCLE – 100%

OPERATING SPEED

Typical speeds of 4-6 seconds* depending on configuration. EFO (extra fast operation) in up to 1 second.

OPTIONAL ACCESSORIES - Please see page 18

Accumulator – allows a number of operations in power failure mode

EFO (Extra Fast Operation)

100/200mm Traffic Light Systems

Manual Hand pump

High Security Cabinet

SAFETY - Option of vehicle detector loops and safety photocell beams.



Foundation:
Only 150mm
required

CIVIL REQUIREMENTS

Based on a 2500mm width blocker L:4600mm x W:3540mm x D:400mm
(Note: Power and control wiring ducts required).

Control Cabinet Foundation L:600mm x W:900mm x D:300mm

ELECTRICAL REQUIREMENTS POWER - Three Phase Supply

*This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453

The original Terra Blocker, first tested in 2004 with a 6800kg American truck travelling at 80kph (50mph), then tested in accordance with PAS 68 in 2007, & re tested in 2009 to test the latest technology breakthrough from our on going R&D program.



PAS 68 & K12 L3 Terra Blocker

PAS 68 Terra Blocker MkII 7500kg @ 30mph

V Road Blocker 7500[N2]/48/90:0.0/0.0

Tested dimensions: width 3000mm, lift height 810mm

K12 L3 Terra Blocker: 6800kg American Truck at 80kph (50mph) Zero Penetration

Tested dimensions : width 2500mm, lift height 810mm



Successfully impact tested to the latest BSi PAS 68:2010 specification stopping a 7500kg vehicle travelling at 50mph (80kph) which equates to 1852kJ. Maximum width 5000mm.

Hydraulically driven. Designed for ease of installation and maintenance. The Terra Blocker can be interfaced to any access control systems.

BENEFITS & FEATURES.

Hydraulically operated, 400V

100% duty rating

Instantly reversible

Width up to 5 metres (securing 7.4m apertures)

Impact tested to the latest BSi PAS 68:2010 specification with a range of energies; different mass of vehicles and speeds.

Original Terra Blocker impact tested with an 6800kg

American vehicle travelling at 80kph, and remained fully functional after impact.

Wide range of Accessories available

Control cabinet recommended to be installed within 10 metres of blocker

The Road Blocker's Top Plate is fully coated with an anti skid resistant treatment which has been fully tested under laboratory conditions for at least 12 months.



Other impact tests:

PAS 68 Terra Blocker

7500kg @ 50mph:

V Road Blocker

7500[N3]/80/90:4.0/25.0

Tested dimensions :

width 2500mm, lift height 1100mm

PAS 68 Terra Blocker MkII

7500kg @ 50mph:

V Road Blocker

7500[N3]/80/90:13.5/25.1

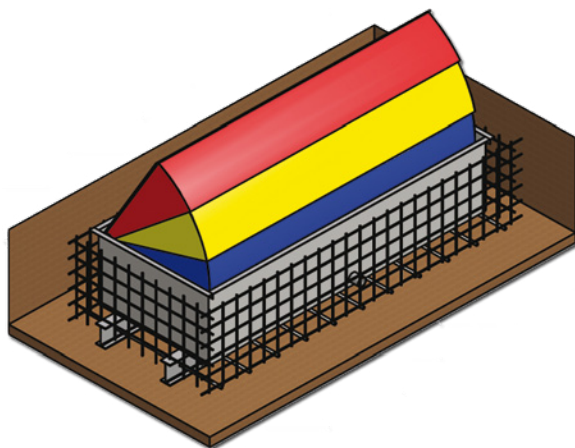
Tested dimensions :

width 3000mm, lift height 950mm

Maximum width: 4000mm

Applications: Sites that require high security PAS 68 barricades

High Security | Anti Terrorist | Government Institutions | Military Bases | Airports



First Terra Blocker impact test in 2004.
K12 L3 test with a 6800kg American truck travelling at 80kph (50mph).
Fully functional after impact.

In event of Power Failure

Fail safe (opens to the lowered position)

Fail secure (remains in the raised position)

Option of an automatic Accumulator or a manual hand pump is available if the blocker is to be re-raised during power failure.

DUTY CYCLE – 100%

OPERATING SPEED

Typical speeds of 4-6 seconds* depending on configuration. EFO (extra fast operation) In up to 1 second.

OPTIONAL ACCESSORIES - Please see page 188

Accumulator – allows a number of operations in power failure mode

EFO (Extra Fast Operation)

100/200mm Traffic Light Systems

Manual Hand pump

High Security Cabinet



SAFETY - Option of vehicle detector loops and safety photocell beams.

CIVIL REQUIREMENTS

Based on a 3000mm width blocker

L:2200mm x W:4000mm x D:935mm

(Note: Power and control wiring ducts required).

Control Cabinet Foundation

L:600mm x W:900mm x D:300mm

ELECTRICAL REQUIREMENTS POWER

Three Phase Supply

*This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453



Road Blocker & Rising Kerb Accessories

The Road Blocker's hydraulic control cabinet is recommended to be installed within 10 metres of the unit.



Road blocker's Hydraulic Control Cabinet installed behind an automatic barrier cabinet.



Terra Blockers control cabinet installed next to blocker

Traffic light systems and signage should always be installed with the road blocker systems to advise the all users of its operation.

Pictured below (left to right) 100mm traffic light head, traffic lights pole mounted, traffic lights cabinet mounted & signage pole mounted on control cabinet





Vandal resistant traffic light cages



The Control Cabinet is also available in a stainless steel finish.



Internal Blocker Lights

Emergency hand pump

Accumulators





Access Control Systems



Frontier Pitts Road Blockers can be interfaced to a wide range of access control including Card Readers, Intercom Systems, Remote VHF Systems and Digital Keypads. The access control readers can be mounted on pedestals which are recommended to be installed a minimum of 3 metres from the road blocker system.



Standard Car Height Pedestals. Installed with bollards for protection

HGV & Dual Height Pedestals for use by cars & HGVs the road

Road Blocker Safety: Vehicle Detector Loops, Timer & Traffic Light Systems



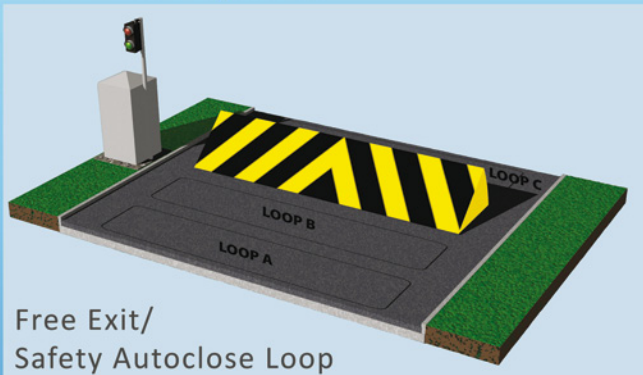
Typical Road Blocker Systems



Controlled Entry Systems



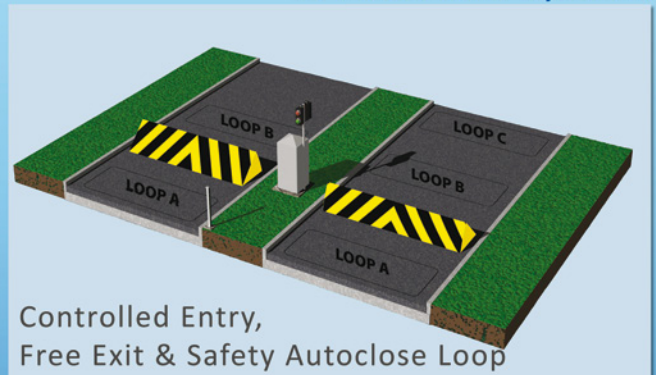
Free Exit System



Controlled Entry & Exit System



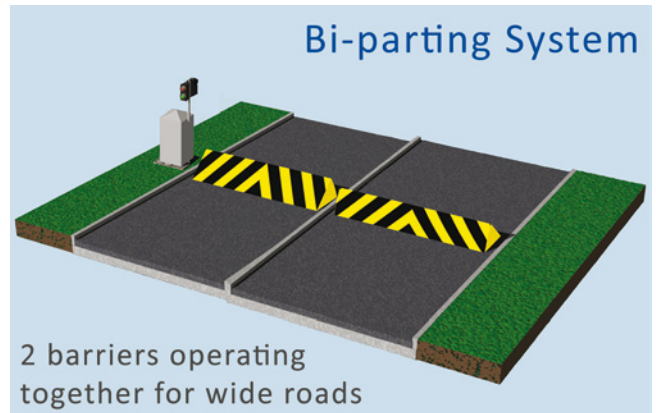
Controlled Entry & Free Exit System



Controlled Entry & Free Exit System



Bi-parting System



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